

AINSLEE'S MAGAZINE

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"Mrs. Biddle turned to see the tearful Miss Pollock being supported on Mr. Woodmansee's arm and led into the house."

"The Elopement."—p. 195.

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THE ELOPEMENT

BY EUGENE WOOD

"I DECLARE, if it wasn't for the looks of it, I wouldn't go one step."

The man standing outside the day coach of the north-bound train said nothing. It did not seem necessary to him to say anything now. He had responded to that sentiment too many times before.

"But, of course, now that I got my ticket bought and everything," reasoned the woman leaning out of the car window as if to convince herself. "Cousin Jabez invitun me so particular and all. And then I hain't ben back to York State for thirty year. You was with me then. You mind how I took you along with me? I woosht you was goin' along now. I don't feel right about leavin' you all alone. It dooz seem so kind o' heartless."

"Oh, I'll get along all right," said the man, calmly, and looked to one side.

"Well, you must write and tell me how everything is. I know I'll feel awful worried about you. You'll write now, every week."

"Yes, mam. Hullo, Johnny. How're you?"

"Be sure and lock up everything when you go 'way from the house."

"Yes, mam. That's Johnny Mara."

"Is it? And do up your dirty clothes every week in a bundle and take 'em over to Longbrake's so's Miss Bennett kin git 'em when she comes for their wash. Laws! I feel awful worried about your socks; you jist go right through 'em and nobody to darn 'em for you. Well, you'll jist have to git new ones. I got the biggest notion not to go at all. If it wasn't for the looks of the



"'Good-by, Augustus,' she answered, gripping the hand he gave her. 'Write reg'lar. Put the milk bucket out every night on the back porch. The tickets is in the blue cup on the second shelf of the pantry cupboard.'"

thing, I'd back out right now. Don't forget to change the under-sheet once a week. You know where the clean ones is, in the lower bureau drawer. And put the top sheet in under you and the clean one on top. Tchh! I'll bet the bed won't be made once the whole time I'm gone. I got a good notion not to—— And mind, you water them plants. If it should turn real cold, you better come home once in a while and look after the fire and see how things is gittun along. I wouldn't have them plants git froze, especially that pineapple geranium——"

"All aboard!" called out the conductor.

must be doing for them. And yet what we do, though with the best intent may be only murder of body and soul. The time is come when they are no longer ours; they are partly their own. With a girl, the problem is simpler, but the boy is like the fisherman in the Arabian tale that finds the leaden bottle in which is sealed up an Afreet. Very potent is the Afreet, very potent for good—let us hope, for good—but also very potent for evil, as we cannot forget. We would not have our sons miss finding the bottle, and yet who of us but has seen the day when the Afreet's cruel shape darkened the heaven over our heads and menaced our lives, when we wished we knew the magic word that could conjure the evil Djinn into the vase again, that we might hurl it far, far out to sea? And no such word exists.

The widow Biddle was not taken by surprise when her son's time of peril came. The leaden bottle was found, but never was unsealed. She knew that what Augustus needed was a mother's tender watch-care. That watch-care was not relaxed one moment in thirty years. She meant him to marry some day, but that day was like the moon that the little child wonders to see go about as it goes. It was always off yonder. She looked about her and saw the foolish matches and the wrangling homes, and resolved that her boy should not throw himself away if she could help it. There was no need for hurry, because a man can always get married, no matter how old he is. She knew that while in theory it is the man that asks, in practice it is the woman that arranges conversation so that the man must say, "Will you marry me?" or else feel like a natural-born slink. She did not propose to have her Augustus crowded up in a corner that way. When she found the right kind of a girl she would do the arranging of the conversation; she would secure the propinquity that provokes love. She had not yet found the right girl; of late years she had not prosecuted the search with much diligence. It seemed to her that Augustus was just about as well off as he was. He had a comfortable home. She looked after him and took care of him, laid out his clean linen and told him when to go and get his hair cut. There were no children whooping and howling around and tracking up the house. Augustus appeared to be satisfied. Probably a tiger brought up on the bottle, kept in a cage and fed on mush and milk, would never regret the absence of butcher's meat. But leave the door open—

Worried for fear he would not wind the clock, but otherwise calm in her mind, Mrs. Biddle went on a visit to her folks back in York State. If a man is not steady and settled down when he is going on forty years old, when will he be, I should like to know? So the tiger's cage door was left on the jar.

Alas for men! They need watching all the time, even when they are past forty. In a town like Minuca Center they generally get it, too. There is no lack of interest in other people in such a place. The Center hummed like a beehive when it saw Augustus Biddle taking the girls out buggy riding, some of the old maids, too, who the men folks were sure were fairly eating their hearts because they were not married and working hard every day and Sunday, too, for board and clothes. Along in the latter part of January, when Mrs. Biddle had been gone a month or so, it was generally agreed that the situation was critical and that something ought to be done about it.

"W'y, if his ma knowed the way he was a-actun," vowed Sarepta Downey to Mrs. Lester Pettitt, "she'd jist about go up."

"Well, I don't know's I blame him much," declared Mrs. Pettitt. "Anybody that's ben kep' under the way he has all his life. If I was a man, I'd fly 'round amongs' 'em too, come a good chance."

"Oh, he ain't a-flyun' 'round amongs' 'em now no more," corrected Sarepta. "Huh-uh. Not now. He's got all through with that. I don't know where your eyes are at that you hadn't seen that. He's got her all picked out, bless your soul."

"Who?"

"W'y, Carrie Pollock!"

"Carrie Pollock? W'y, I thought Frank Woodmansee was goin' with her."

"Well, so he is and so's Augustus."

"If he gets her away from Frank Woodmansee he's a dandy," put in Mr. Pettitt, who laid down his paper to listen to the gossips. "Why, Frank Woodmansee'd tole a bird down out of a tree with his talk. Best man ever Blackwell had on a tin wagon. He could get more eggs and butter from the farmers' wives for less tinware than any man goin'. Blackwell kicked like a steer when Frank got too big-feelun to drive a wagon and wanted to come in and be in the store, but he jist had to give in to him. Terrible ambitious, Frank is. And now Blackwell don't do nothin but brag how smart Frank is. He jist about runs the whole concern. He's a little too dag-gon smart, I think. You mark now if he don't euchre

Blackwell out o' everything and have it all to himself in about two years. Oh, he's bound to rise."

"Carrie'll do well to get him then," said his wife.

"Well, I don' know about that. Frank's terrible selfish, and outside o' business they ain't a great deal to Frank. He's the best one of the whole tribe. The rest is jest common on'ry."

"Carrie thinks a lot of Augustus," said Miss Downey. "He's real well educated, Augustus is, and knows a lot o' poetry. He's good to his ma and handy around the house, always doin' something to help the women folks. Oh, Frank'll have to git his feet in under him if he's goin' to keep her. Augustus is rushin' her for all he's worth. Hadn't 'a' ben for him, Carrie and her ma wouldn't ever 'a' went no place. Frank wouldn't never think of it, but now since Augustus got to comun around w'y Carrie and her ma has ben to more places than they ever was in their born days before. Reg'lar foot-race it is; whichever one o' them gits there first the other one takes her ma some place."

"So's to keep in with Carrie," suggested Mrs. Pettitt.

"Well, I don' know," answered Sarepta. "Look like to me, Frank he'd like to git Carrie, she's so pretty, and he'd like to git her ma, she got such a good head for business. Why, law me! if it hadn't 'a' ben for her, Jim Pollock wouldn't amounted to *any* thing, and after he died she got more out o' the farm on sheers 'n he ever did workun it himself, and here they're livun in town and havun everything nice. Yes, sir, Frank wants her, too, and"—Sarepta leaned over and laughed against the back of her hand—"look like to me that since Augustus started in to cut out Frank with Carrie, he thought he might as well make a good job of it and cut him out with her ma, too."

"Tchk! The land!" ejaculated Mrs. Pettitt.

"Carrie's a right pretty girl," mused Mr. Pettitt. "I ben havun my eye on Carrie this good while now." He looked at his wife out of the corner of his eye. She was very busy with an apron of Janey's she was hemming. She was painfully jealous-hearted, and Lester Pettitt loved to tease. "But if I was to be left a widower right sudden, I don't know but I'd kind o' shine up to Ma Pollock."

"Oh, you!" burst out Mrs. Pettitt, unable to restrain herself.

"Yes," pursued Mr. Pettitt, "she'd suit

me 'bout as well as any of 'em. Good lookun, too, she is. Women like Caroline Boyce don't no more'n git good and ripe till they're along about forty. Now, ma, here, when she's forty, you know what she'll look like? Why, a two weeks' washun done up in a bedspread." He winked at Sarepta, who knew that if there was one thing that Mrs. Pettitt dreaded worse than death itself it was fat. She was just a plump little body now, but her sister Polly Ann was considered "a sight!" She weighed three hundred pounds, and always used to hop over the hot air registers in the aisle of Center Street church. She was afraid to step on them lest she break through.

"Caroline Pollock's more'n forty," said Mrs. Pettitt, with much asperity. "Look at that big, grown-up daughter."

"Oh, no, she ain't," corrected Sarepta. "She married Jim Pollock when she wasn't but eighteen, and Carrie's only nineteen now. She ain't a day over thirty-nine. She's jist about Augustus Biddle's age."

"Gus ort to let Frank have the girl and him go for her ma," said Mr. Pettitt. "Man like him, raised by hand, as you might say, ud never git along with a young girl. You know what Caroline Pollock is, but Carrie, law! she don' know what she is herself. Man marry her, he's got to take her sight unseen and trust to luck. My! my! How many of 'em gits fooled. Now, me, f'r instance—But what's the use?" Mr. Pettitt sighed and sadly shook his head.

Mrs. Pettitt speared him with a look, but he pretended not to notice. Sarepta saw that it was time to make a diversion.

"My land!" said she, "if Augustus Biddle should marry Caroline Pollock, his ma would jist naturally paw up the ground! W'y, them two ud no more git along together than I don' know what. Mercy! What a time they'd have. I sh'd think somebuddy'd up and let that pore woman away off yan in York State know what kind o' doin's they was goin' on around here. Wouldn't she come home jist a-flukun? My! well, I must be gittun along. Here 'tis 'most bedtime and me settun here runnun on about my neighbors as if I didn't have anything better to do. Well, good-night all. When you comun over, Mis' Pettitt? You hain't come to see me in a long time. You, too, Mr. Pettitt. Oh, I can see; you needn't bring the light. Snow's goin' awful fast, ain't it? Well, good-night."

The door had no more than shut on her when Mrs. Pettitt exploded with pent-up

fury. "WHAT did you go and talk like that for before that woman when you know— when you kno-o-o-ow that she runs and tells everything that she hears?"

Mr. Pettitt threw up one arm as if to shield his head and cried in mock terror, "Help! help! help!"

She was determined not to let him see her smile. "Oh, it's nothing to laugh at. I declare! you're more of a child than Janey is right now. I don't know what possessed you to say such a thing before her."

"Say what?" inquired the innocent Mr. Pettitt.

"Oh, you know very well. That about you gittun fooled in me, for one thing."

"Well, didn't I? Didn't you promise the preacher you'd obey me? Well, do you? No, you don't. Didn't I command you last night to sew that button on my vest? Yes, I did. Is it sewed on? No, it hain't. *You* don't care if I go round town lookun like a scarecrow and people pointun the finger o' scorn at me. I'll bet my second wife won't——"

"Oh, hush up and gimme that vest. I forgot all about it as slick as a whistle. I'll sew it on now while I think of it. Well, land of love! Did you ever hear the beat o' them two fellows tryun to cut each other out with two women at once? The idy!"

"What I want to know is what Ma Biddle'll do with Augustus. He's gitten 'most too big now to be stuck with a pin."

"I hope she won't come home till he gets married."

"Oh, somebody'll write to her before."

"Who?"

"Who? W'y, anybody. I know fifty that ud ask for nothun better. I wouldn't put it apast you, for one."

"ME? Me tell her? W'y, Lester Pettitt, you're the meanest white man that ever lived! W'y, I'd no more think o' doin' such a thing— Go on away from me. Go on, I tell you. I'm mad now. The idy of sayun— Go way, now-ah. Come a huggun and kissun around me after sayun— Lester-rah! If you do that again, now— I'll—I'll stick you with a pin. Sh! You'll wake up Janey."

Somebody did write and tell Mrs. Biddle, and it wasn't Augustus, either. It just goes to show how if you escape Scylla you fall into Charybdis. Be too lax with children, and they run wild and terrify the neighborhood; be too strict with them and they become expert dissimulators, preserving the form of truth, but denying the power thereof. So it was that Augustus's letters, while professing to give all the news of the Center,

omitted that which would have been even more interesting to her than it was to her neighbors. Who it was that sent the postal card on which was written: "When the cat's away, the mice will play," is not certainly known, for it was not signed. When



Au - gus - tus !

it got to Mrs. Biddle it had much the same effect upon her as the appearance of the fingers of a man's hand that came out of the wall and wrote upon the plaster had upon the revellers at Belshazzar's feast. It put a stop to all her enjoyment. She worried and worried about what it could mean. Then came a letter signed which gave her the interpretation. Her kingdom was about to be divided and given to another. She packed her trunk after she answered the letter.

It may be regarded as significant that Frank Woodmansee should have met her at the train. They had a long conference together. "Wootsy" Morton, the depot operator, saw them talking and called up Augustus on the telephone.

"Say, Biddle!" he said, his hand making a tube over the transmitter, "is that you, Biddle? This is Morton at the depot. Say, your ma came in on No. 4. Why didn't you— Yes, on No. 4. Why, Frank Woodmansee met her. Him and her is holdun a confab on the platform now. Didn't you know she was comun ho— Hello! Are you there yet? Hello, Central! What did you cut us off for? You did, too. Huh? Well, he don't answer. Say; ring 'em up again."

Bzzzzzinngt!

"Hello, Biddle!"

"Don't answer," said Central in her prim, flat, faraway voice.

The hand 'phone in Augustus's office swung violently on its double cord as Augustus slammed the door shut and locked it, after taking a paper from a desk drawer and thrusting it into his pocket. His horse and buggy were in the shed, and he drove up Columbus Street, looking behind him fearfully.

"She'll most likely walk over," he said to himself, "'specially if she's got somebody to carry her gripsack. She'll go to the office first and then she'll go to the house, and if I ain't there, w'y, then her and Woodmansee'll go on up to— 'Tain't quite as much time as I'd like to have, but still— I laid out to go easy about it and not plunge in headlong this way."

He jumped out at the Pollocks' house, hurriedly tied his horse and went around by the side door at which he knocked. Mrs. Pollock answered the summons.

"Where's Carrie?" he gasped and pushed his way in. He felt a kind of goneness in his insides.

"W'y, she's— I don't know where she is, Mr. Biddle. Some girl come along a

while ago and pirted for her and she put on her things and went out. I guess she won't be gone long."

"How long?"

"W'y, I don't really know; half an hour, mebby, or mebby an hour."

Augustus sank down into a chair apathetically, his hands drooping between his knees, and his head bent forward. He had not counted on her being from home.

"Don't you think you could find her?" he asked, after a while.

"W'y, I don't know as I could." Then as she noted the expression in his face, Mrs. Pollock cried out, "Augustus Biddle! What is the matter? You look like you'd lost every friend on earth."

"Ma's come home," he said, and licked his lips. "She didn't send me no word she was comun. 'Wootsy' Morton telephoned me he seen her and Frank Woodmansee holdun a confab on the depot platform. I'll jist bet you anything—" He got up and walked the floor. "If he has now—if he has, I'll break his neck, I will, by Godfrey!"

"W'y, Mr. Biddle!"

"I don't care. Tattlun on me. Consarn his picture!"

"You ain't saw your ma yet?"

"No, I hain't." He paused. "I don't know as I jist exactly wanted to see her till—till afterwards. You don't know where Carrie is?"

"W'y, no, I don't. She started out— What did you want to see her about?"

"Why-ah," said Augustus, turning his hat in his hands, "I kind o' thought mebby she'd like to take a ride over to Sunbury with me."

"To Sunbury? And your mother jist come back home?"

Augustus nodded as he looked into her face with a sort of pitiful smile and a dog-like wistfulness. It was as much as to say, "Don't you understand why?" Mrs. Pollock stooped to pick a raveling off the floor and rose up red in the face. "I was over to Sunbury Friday and stepped into the County Clerk's office—" He broke off suddenly and his mouth hung open as if he had just thought of something. "Would you be willun"—he said, gulped, flushed and went on—"would you be willun to go for a little ride with me summers out of the way till I got kind o' cammed down? Ma comun home this away kind o' upset me. I woosht you would now."

"W'y-ah—" The widow hesitated.

"I woosht you would now," he persisted.

"I'd—ah—I'd like to talk to you about somepin."

"W'y-ah, I expect mebby I could," said the widow, slowly. "If you didn't go too far."

To Augustus, who looked every minute to see Vengeance coming around the corner of the house, it seemed an age before Mrs. Pollock got herself ready for the drive, but, terrified as he was, he could not help but recognize the fact that she had put in the time well. She was a fine-looking woman and no mistake, but Augustus could not tarry to admire, so anxious was he to flee from the wrath to come. The neighbors noticed when he drove away that he kept looking around all the time. Minnie DeWees said to her mother, "I jist bet you they's somepin up. Now, you mark; they's a hen on, sure as shootun." Afterward she bragged no little of her gift of prophecy.

Mrs. Biddle and Frank Woodmansee stopped at the coal office. It was locked up. They knocked on the door. There was no answer. Mrs. Biddle went to the window and shaded it with her hand so as to see in. The objects within looked familiar to her, even the paper-weight carved out of a piece of cannel coal. They made her homesick for the sight of her son. But the hand 'phone dangling on its cord and the books left lying open, fretted her; it looked so slack and careless. She wanted to get in and straighten things up. He used to be so particular, but now, since that woman had got after him, he was letting everything go.

"Well, he ain't h-yur," said Frank Woodmansee. He noticed people stopping to look at him carrying Mrs. Biddle's gripsack and smiling so knowing. He told himself again that everything was fair in love and war, but he wasn't so sure of it as he had been.

"No, he ain't h-yur," assented Mrs. Biddle, with a sigh. "I reckon we'd better go on around to the house, and if he ain't there I can leave the gripsack with Mis' Longbrake—I expect you're kind o' tired luggun it around—and then we'll go up and see—that woman." There was a cluck in her voice as she spoke the last words.

But the Biddle house was as deserted as the Biddle coal office. When the widow realized with a cold sickness at her heart that she was locked out of her own house, she sighed and went next door. Mrs. Longbrake had been watching her and came to meet her with, "W'y, I declare if it ain't Mis' Biddle! My! how well you're lookun! It done you lots o' good to go away fer a spell. Come in, won't you, and set a while."

"No, thank you. I got to go right on. I'd like to leave my gripsack here, if you don't mind."

"W'y, certainly. Clarence, take Mis' Biddle's gripsack and set it over there by the bureau. Take your han'kerchief, Clarence. How many times have I got to speak to you about snuffun that way? I s'pose you come fer the weddun, Mis' Biddle."

"What weddun?" snapped Mrs. Biddle.

"W'y, Augustus and Carrie Pollock. I says to Mr. Longbrake when he come home and told me about it, 'It's funny,' I says, 'that——,'"

"Is he married?" demanded Mrs. Biddle of Mrs. Longbrake and of Frank Woodmansee, turning first to one and then the other.

"I says to Mr. Longbrake, 'W'y, what does he want to git married over to Sunbury fer?' I says. 'Well,' he says, 'that's whur he got the license out,' he says."

"It ain't so!" cried Frank Woodmansee.

"It ain't so! Carrie Pollock?"

"Carrie Pollock," asserted Mrs. Longbrake, bowing her head, closing her eyes and priming her lips. "Nineteen years old. That's what the license said. Mr. Longbrake seen it when he was over to Sunbury, and Mr. Curl, the County Clerk of Union County, he ast him if he knowed them parties, and Mr. Longbrake he said he did, and——" The sentence dwindled into nothing, for, with one look of mutual rage, Mrs. Biddle and Frank Woodmansee turned and hurried down the front walk. They would go up to Carrie Pollock's and have this thing straightened out.

"I reckon he feels right bad to git the mitten that way," said Mrs. Longbrake, as she watched them go up the street. "It kind o' s'prised him, 'pears like. I don't reckon Mis' Biddle likes it any too well, either, looks o' things. Clarence, I declare I don't know what I'll do to you if you behave that way before people again. I was mortified to death at you."

Frank Woodmansee rang the Pollock doorbell and rang and rang. They seemed fated to be shut out on all sides. All the neighboring windows that gave on the Pollock house concealed each an anxious watcher. Minnie De Wees, who lived in the third house, and could not see very well from there, actually went out on the front porch to look, but her boldness was condemned by all. They said that was a little too much. Mrs. Biddle and Frank Woodmansee talked very earnestly together in low tones, and Minnie De Wees nearly went out of her

mind because she could not hear them. They gave one more ring and stood waiting. Then they heard the gate-latch click; turning around, they beheld Carrie Pollock entering the yard. Woodmansee gave her a searching look.

"Why, how do you do, Mrs. Biddle?" said the girl, and then turned demurely to greet the man. "How do you do, Mr. Woodmansee? I thought you were in New York State, Mrs. Biddle. Aren't you home rather unexpected?"

Mrs. Biddle glared at the girl. "What have you done with my son?" she demanded. "Ain't you asha-a-med of yourself to stand there talkun to me in that way after the way you've ben a-actun? And you dare?"—she gulped—"you dare to look me in the face, you—you— Oh, for half a cent, I'd— Where's your mother? To take advantage of my absence in such a way when you knowed I was away from home and couldn't take care of him. It's a pity, it's a pity I couldn't leave home a minute to go and visit the only relations I got an some of 'em I hadn't saw for thirty years, but you must go and— Where's your mother? Can't you talk?"

(You ought to hear Minnie De Wees get that off. She can do it to perfection.)

Carrie Pollock looked at the mother in amazement.

"Why, what's the matter?" she gasped.

"They're tellun it around that you're goin' to marry Augustus Biddle," said Frank Woodmansee.

"Who's tellun it around?" demanded Carrie. "I'd thank people to mind their own business and not go 'round with a whole pack o' lies about other folks. It ain't so. Now!"

"I s'pose you don't know nothun at all about his gittun a marriage license over to Sunbury to marry you," sneered Mrs. Biddle. "I s'pose you didn't hear nothun at all about that."

"No, I didn't; not till you jist now told me I didn't hear one word about it." Frank Woodmansee looked as if a great load had been taken off his mind. Mrs. Biddle was still suspicious.

"I s'pose you want me to think Augustus went and got that license and you givun him no encouragements whatever."

"Who, him?" Miss Pollock bridled angrily. "I don't care what you think. I guess I don't go 'round tellun folks I'm a-goin' to marry 'em before they ask me to. I wish't you'd go on away from here.

Mr. Woodmansee, won't you make her go 'way? I don't know anything about your old Augustus! Ma! Where's ma? Botherun the life and soul out o' me with her old Augustus! The idea! Ma!" And Miss Pollock burst into a fit of crying and begged to be taken into the house; she never was treated so in her life; the key to the side door was under the kitchen step, if ma was out; she couldn't help it if Augustus Biddle took out forty marriage licenses; regular old Molly he was, anyhow; she wouldn't have him if he was the last man on earth. She wished she had never laid eyes on him.

Mrs. Biddle walked out of the front gate, but turned to see the tearful Miss Pollock being supported on Mr. Woodmansee's arm and led into the house, comforted by him in words that she could not hear, but whose substantial import she could imagine as well as the rest of the neighborhood. It gave her pride a rude shock to hear her son characterized as a "regular old Molly," and indignantly rejected as a possible husband by a snip of a girl that wasn't fit to black his shoes for him. He was too good for her, so he was, if she only knew it. She'd tell her so the next time she saw her, too. The very idea!

Mrs. Biddle went back to her own house and got little Clarence Longbrake to come over and crawl through the cellar window and open the back door for her. This was her home-coming; this her welcome. She went through into the parlor and opened the shutters. The plants she had prized so highly stood yellow and rigid. She plucked a leaf and it crackled in her grasp. Papers were scattered all about. The bottom of the stove seemed bursting with ashes which had spilled out on the carpet. The bureau drawers were half pulled out, and from them poured a cascade of soiled collars and rumpled shirts. All the lessons of neatness which she had taught him for years were forgotten the minute her back was turned. No; she would not do him that injustice. He would have been all right if he hadn't been led away. But that the tender watch-care of a mother all these years should have been as a dream of the night as soon as a silly girl with a doll's face looked at him— Oh, that was hard, that was hard to bear! This was her home-coming; this her welcome. She sank into a chair and crumbled the dry leaf in her fingers. Her eyes burned. She wondered at it a moment, for she was a woman not used to weep. All of a sudden, she caught an inward, quivering

breath and the tempest of her grief and loneliness burst forth. Like Jeremiah amid the ruins of Jerusalem, she wept as she mused on the former things.

But when the storm had overpast, she

him and sat down to wait. It was very late for him. The town clock struck ten. She went into the sitting-room and wound and set the old clock on the shelf. Overcome by an impulse she could not restrain, she went



"They sat before the grate fire in the bridal chamber of the Eagle Hotel in Sunbury after a supper at which the landlord had surpassed himself."

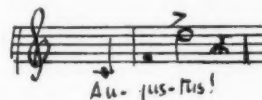
roused herself and set about straightening up the house. She went out to the grocer's and the butcher's and got materials for supper. She expected Augustus home by then. The potatoes and the coffee she set on the back of the stove to keep warm for him. She would not fry the steak until he got home. As it grew later and later she went oftener to the door to listen for him. Once she was sure she heard him open the front gate, but it was only her imagination. At last she cooked the meat herself and sat down alone to eat what she could.

As it came on to nine o'clock, his bedtime ever since he was twelve years old, she remembered that his bed had probably not been made for the day. One glance showed her that it had not been made or the linen changed since she had left, and she had been so particular to tell him about it. Something saddened her as she stripped off the sheets, wrinkled and twisted into ropes. For thirty years he had not slept away from home, not since the time he had gone with her to York State on a visit. How many times had she heard him say his prayer at that bed and had called out to him from the sitting room:

"Good-night! Sleep tight!"

She turned the covers back all ready for

out on the back porch and, looking into the blackness of the night, called out as of old time:



But only an echo came back to her. Slowly she turned and went inside.

"The preacher didn't appear to notice where you changed that one into a three, did he, Augustus?"

"No," said Augustus.

"At any rate, he didn't say anything about it, huh?"

"No," said Augustus.

"But, laws! I won't be thirty-nine till November. I was just about Carrie's age now when she was born."

"That so?"

"Uh-huh. How old are you, Augustus?"

"Who? Me? I'll be forty the last of September."

They sat before the grate fire in the bridal chamber of the Eagle Hotel in Sunbury after a supper at which the landlord

had surpassed himself. There were four kinds of cake and eight kinds of preserves on the table, not "boughten stuff," either. The landlord's wife had put up all the preserves herself, they had so much fruit on the lot.

"What makes you so still, Augustus?"

"Oh, I don't know."

A long pause.

"You ain't sorry, are you?"

"Huh?"

"I say, you ain't sorry, are you?"

"W'y, no. Oh, no; no."

Another long pause.

"W'y, what made you think I was sorry?"

"Oh, nothing, only you was so kind o' still. You right sure you ain't, now?"

"W'y, of course not."

Augustus sat looking at the soft-coal fire from which now and then a cinder fell. The woman rocked in the rocking-chair slower and slower. She stopped. Then she spoke as one determined to settle the matter once and forever.

"Because if you are," she said, "you've only got your own self to blame, for it won't be my fault if you don't have a happy home. Mr. Pollock, he says to me, 'Carrie,' he says—they was pretty near the last words he said to me, that is sensible, for towards the last he was kind o' flighty and light-headed—'Carrie,' he says to me, 'you've ben a faithful, true and lovin wife to me, you have,' he says. And so I was, and so I'll be to you, Augustus. For I could have got married many's the time before this, as I told you this afternoon when we was goin' apast Mumma's place, but seem like I didn't want to while Carrie was little, but now that she's growed up and likely to git Frank Woodmansee now any day, I don't deny but what I was lookun around some, and I don't care; I don't think 'twas no more'n right that I should, me not beun thirty-nine till next November, and jist in the prime of life, as you might say, and what ud I do if Carrie was to git married and me all alone in that great big house? And I always did like you, Augustus. Seem like you had such nice ways about you and understood a woman so well. Mr. Pollock, he was real good to me, that is, as good as he knowed how, but he was a kind o' rough-like sometimes. And then agin you ain't like some o' these men that's raised careful. They're apt to be delicate and Nancified, as I told Carrie. And I knowed all the time that Carrie was jist plumb distracted about Frank Woodmansee, only he was kind o' half after me for a

while there, and she only took up with you to make him jealous. Now, that's jist the pine-blank facts I'm a-tellun you. You mind I told you that when we first started out this afternoon so's to kind o' git away from your ma till you got things straightened out like. And I told you then jist like I tell you now that Carrie's a nice enough girl, for all she's my daughter, and I wouldn't say a word agin her for the world, but she ain't no kind of a girl to marry a man that's ben brought up for so long by a woman that's as good a housekeeper as your mother is, because I *know* she's a good housekeeper, for everybody says so, and as near as I can find out, she does jist exactly as I do in everything, except I always cook a little carrots with my peas. They taste so much better that way. But I kin cook 'em the other way. Now, your ma's punkun pie is jist mine to a T, because I tasted hern at a social at Center Street one time. And you said you got the notion you wanted to git married, and now was your only chance while your ma was away and if you'd 'a' sispicioned she was a-goin' to come back to-day you'd a' spoke to Carrie before, and you thought if you got the marriage license it ud kind o' bluff her into takun you, but it wouldn't, because I know that girl too well, and still you didn't want to git it in Minuca Center, because if she didn't *have* you after all how flat you'd feel and all like that and what should you do, now that you had paid a dollar for the license, and it seemed like a waste o' money not to make some use of it, and you ast me yourself, now, didn't you? if I wouldn't marry you, and I said you could change that one into a three so's nobody'd ever notice it, and it would be all right, for my name is Carrie Pollock as well as Carrie's is, and you put your arm around me and hugged me and kissed me. Now, ain't that so?"

"Yes, that's so," said Augustus.

"Well," she said, and began rocking again. She seemed a little inclined to cry, but she stopped when she heard the big clock down stairs in the empty dining-room strike slowly and hoarsely.

"Ten o'clock," she said. "My! it's late, ain't it?"

Augustus sat silent for a minute, and then he cried out: "Hoo!"

"I didn't say nothin'," she said.

"Oh-oh," Augustus seemed liked one waking from a dream. "I thought I heard ma callun me. Ho-hum! I'm sleepy, ain't you?"



William K. Vanderbilt, Jr., and His Fast French Automobile, "The White Ghost."

AUTOMOBILES TO-DAY

By EDWIN EMERSON, JR.

THREE generations have passed since Sir Goldsworth Gurney ran his steam stage coaches over the country roads of England. The impression that this innovation made on Gurney's contemporaries has all the freshness still of a modern note. Thus Jean Baptiste Jobard, a Belgian savant of those days, wrote in his diary of 1829:

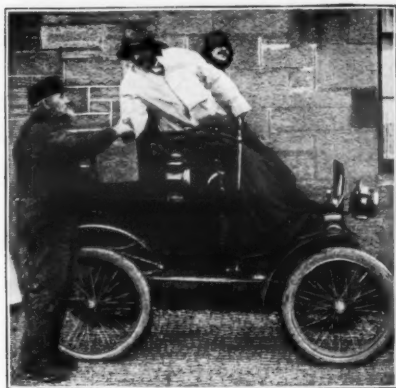
"My first visit in England was to the starting station of Sir Goldsworth Gurney's steam omnibus, which, during the last fortnight, has been running between London and Bath. This carriage, which can accommodate thirteen persons, does not differ materially from other stage coaches, nor has it had any serious mishaps as yet. For my benefit, it maneuvered back and forth over the street pavement and later on a smooth macadam of the highway, without any difficulties of guiding. The drivers of other stage coaches are agreed that the thing is a success, and that before long it will do them much harm."

As it happened, another no less startling innovation—George Stephenson's steam railway—by its rapid industrial development, so engrossed the minds of inventors and capitalists alike that Gurney's early attempts at automobilism were completely overshadowed and soon forgotten. Not until the middle of the last century was the automobile revived—this time in America. It was reinvented

by Robert Dudgeon, of New York, who built a "steam road wagon," as it was called, to carry him on his business trips through Long Island, and to convey his family to church. It was a noisy machine and consumed two bushels of coal and nearly a hogshead of water on each trip. Mr. Dudgeon rode in it for ten years, when the city authorities forbade its further use. A similar automobile was exhibited by the inventor at the Crystal Palace in London, and afterward, until it was lost in a fire. Then automobile progress stopped, until revived toward the close of the century by Benz's discovery of benzine in Germany and Daimler's application of this product to his motors—a fruitful idea, which was soon improved upon by the originators of the modern French automobile. The success of gasoline automobiles in France brought about the revival of steam automobiles in England and America, and was immediately emulated in the United States by the construction of electric automobiles.

It has been reserved for the twentieth century to witness the simultaneous development of automobile construction along all three lines at so rapid a rate that it is impossible as yet to tell which is in the ascendant. Whatever the outcome, it is plain already that the contest is to be decided in America, for in this country alone all the

different principles of construction have found ready acceptance and are pushed forward to their logical conclusion with youthful vigor. With accustomed conservatism, English automobile constructors cling to steam propulsion; in France and Germany progress is made chiefly in the development of gasoline machines. To America, naturally, fell the leadership in the construction



H. W. Egerton, Starting on His Famous Journey from John O'Groats to Land's End in a Steam Carriage.

of electric automobiles; but that leadership bids fair to be rivaled by American builders of gasoline and steam automobiles as well. Some firms in the United States turn out all three classes in almost equal perfection.

The best idea of the advance of automobile construction in America to-day is gained not so much from the fact that a couple of years ago there were barely one hundred automobiles in the United States, while now there are thousands, but rather from the steady progress of new automobile inventions and serviceable devices. "The whole country seems to have gone automobile mad," declared an official of the United States Patent Office the other day, while conversing with the writer. "We have more patents filed for automobile devices to-day than for any other branch of invention, and still they come pouring in." The same might be said of the formation of new companies for automobile construction. Scarcely a day passes that the newspapers do not record the incorporation of a new automobile company. Barely one year ago there were but ten recognized manufacturers of automobiles in America, while now there are more than three hundred. All the energy that

went into the great bicycle boom of the last decade would appear to have diverted itself into this new channel. Nor have the lessons of the bicycle boom been lost. Little fear as there need be at present of an overproduction of automobiles, it is clearly recognized that quick production must be one of the essentials of success. Those makers who launched their automobiles first now have the strongest grip on the market. A case in point is one New York firm that succeeded in turning out some two thousand steam-propelled vehicles before its machines were really perfected. What these early machines lacked was rapidly supplemented by the suggestions and criticisms of the purchasers themselves, so that by the time other makers began to put forth their new products this company was able to exchange its defective machines for new automobiles of an improved pattern which could be trusted to climb steep mountain ranges or to win races abroad.

For another year, perhaps two or three years, the manufacturers will be able to keep their prices at the present top notch, ranging from \$500 to \$10,000. The automo-



Mr. Egerton, at Land's End.

bile is still the newest thing, and as such appeals to moneyed people who can afford to gratify their desire for novelty. Princes and potentates are among the most prominent automobilists abroad, while in this country the best-known advocates of the new sport are such multi-millionaires as William K. Vanderbilt, George Gould, Clarence H. Mackay and John Jacob Astor. After the automobile has ceased to be a mere diversion for the wealthy it will behoove manufacturers

to consider the general public. Then prices must drop, as they are dropping now in France for all automobiles, with the exception of racing machines and vehicles for show.

The first step toward a cheaper vehicle must be that of standard or interchangeable bodies with wheels, tires, axles, springs, gears and other parts of uniform size. Elec-

tween stations it is impossible to replenish. Another bad point, already indicated, is the fact that it takes several hours to charge a battery to its full capacity.

The steam motor, while the farthest advanced, likewise has its drawbacks. First of all comes the question of fuel. The lightest and most effective fuel for generating steam at present appears to be gasoline. Yet, even



John Jacob Astor, One of the Millionaire Advocates of the Sport.

tric automobiles must, sooner or later, be provided with interchangeable batteries, so that old batteries can be thrown out and newly charged batteries substituted without long waits, as is now the case. To accomplish this result manufacturers will either have to agree upon a standard battery or the inventive genius of our electricians must be called up to produce some quick charging means.

Apart from the present slow system of charging electric batteries and the rapid deterioration of motor batteries, the American electric automobile of to-day surpasses all other automobiles in many points. First of all, it is the easiest to manage. It starts at a touch without having to wait for the generations of steam or for carburation. It has no noisy and conspicuous exhaust, nor does it offend by its odor, as is the case with automobiles propelled by gasoline or kerosene motors. No skill is required to run it. On the other hand, there are some distinct drawbacks. There is the undue weight and bulkiness of the batteries, which in itself is bound to interfere with grace of design. As a vehicle, its runs are confined to narrow limits. The motive power is measured by the capacity of the storage batteries. Charging stations outside of the large cities are few and far between. If the power gives out be-

with gasoline, it takes several minutes to generate steam for propulsion before starting. Nearly three times as much gasoline is consumed in this way than it would actually take to run a gasoline motor. This increases the running expenses. While the gasoline is light enough to carry a supply for fifty or sixty miles, the water tank in the average steam vehicle will hold only enough for twenty or twenty-five miles. This means that a stop must be made for water at least once or twice during a good day's run. In long distance races, this is a serious consideration.

The most economical motor for light road purposes, without a doubt, is the gasoline engine. As perfected in France, the gasoline motor comes broadly under two systems. The first of these is dependent upon direct carburation. Air is passed over gasoline in a tank. The gasoline issues forth in such a manner as to mix with from seven to nine parts of air. The chief disadvantage of the system are that the density of the gas is affected by atmospheric conditions and the temperature of the fluid. The gasoline must be kept at a temperature approximating seventy degrees Fahrenheit, or it will refuse to volatilize sufficiently to mix with the amount of air admitted to the carburator.

The other gasoline system depends for its



effectiveness upon vaporizing or spraying. Limited quantities of the gasoline in the tank are sprayed into the carburating chambers, where, mixing with the air, it forms the explosive mixture which drives the motor. The trouble with this system is its uncertain ignition and explosion, often causing annoying delays at the start. Both systems have the advantage of cheapness and peculiar adaptability for light and rapid work.

Cheaper still than the gasoline motor, though similar in its workings, is the kerosene or petroleum motor. The trouble with



this motor, as now produced, is that it takes fully ten minutes to get it in working order, whenever it is stopped. Another serious

The Turkish Minister and His Secretary.

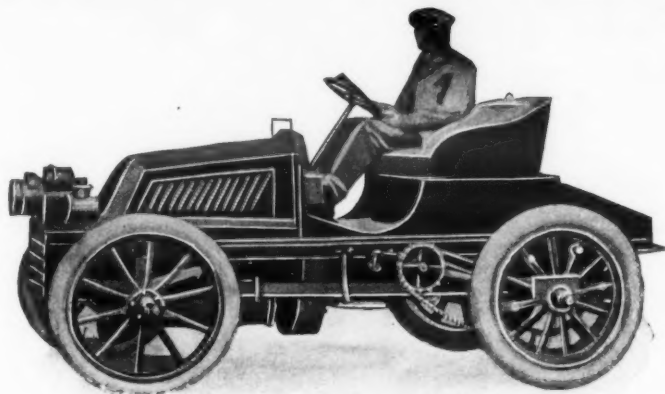
Senator Depew.

The Interpreter of the Chinese Legation and His American Wife.

annoyance is the penetrating odor of kerosene, which soon pervades all parts of the automobile, entering even the cushions and woodwork. Many are the attempts that have been made to deodorize the oil, but none of them so far can be pronounced an unqualified success.

Thus it can be seen that all automobiles have their good and bad points. Improvements must be made before the automobile as such can be pronounced a perfect success.

rapier fencing, they are unquestionably foremost in automobilism. Their great racers, Charron, René de Knyff, Girardot and Levegh were well known as champions in other sports before they made international reputations with their fast racing automobiles. Now they hold records for sixty miles an hour and fifty-five seconds per kilometer, which will be equalled probably, if not surpassed, during the coming spring races for Mr. James Gordon Bennett's international



M. Levegh in His Panhard-Levassor Racer.

Short of perfection as it still is, the automobile is a wonderful advance in modern locomotion. It is strangely exhilarating to sit in a vehicle, knowing that a light pressure of your hand may send you bounding forward at a rate of speed of from five to forty miles an hour, to know that this motive power, though an absolute creature of your will, is incapable of suffering or weariness. Beyond the consideration of sheer speed, such as might be enjoyed on a swift toboggan, or on the cowcatcher of an express train, there is that gratification of guiding and manipulating an instrument responsive to the slightest touch, which makes the *chauffeur* feel master of his own fate.

With such vistas of sport, is it to be wondered at that a modern racing automobile will fetch almost as much as a winner of the Derby, and that the new pastime has been taken up by such all around sportsmen as King Edward VII., Emperor William, the Shah of Persia, or our own Goulds, Mackays, Vanderbilts, Bennetts and Bostwicks?

Strange as it may seem to find the French leading in any branch of sport outside of

challenge cup. Since the great Bennett races were inaugurated, all France seems to have given herself over to automobilism, heart and soul. From Calais to Biarritz, from Brest to Nice, automobiles go humming over the beautiful roads of *la belle France*, and the smallest French road houses and wayside inns now aspire to the title of automobile hotels. In summer the automobilists are most apt to congregate in the region of Trouville, Dieppe, Dinard and Etretat; in winter they flock to Pau, Cannes, Nice and Monte Carlo. By these devotees of the sport the annual road races, such as the famous *Tour de France* and those between Paris, Bordeaux, Boulogne and Nice are watched with breathless interest.

The popular idea upon what the speed of an automobile depends is, like some other popular ideas, quite wrong. By some it is held that one automobile is faster than another merely because its motor develops greater horse-power. Others maintain that the speed of the carriage is governed by the side of the wheels, and support their statement by comparing the automobile with the

high-speed locomotive, which, with its huge drivers, is speedier than the small-wheeled freight engine. Undoubtedly some relationship exists between speed and horse-power; but if the subject be critically studied it will be found that the factor of speed in motor carriages depends not upon one condition alone, but upon five: The horse-power of the motor; the number of revolutions made by that motor; the weight of the vehicle; the gearing and general reduction of friction. If the other four conditions be equal, it cannot be denied that, of two carriages, the faster will be the one having the more powerful motor.

But the intrinsic speed of a motor has no less effect upon the speed of the carriage. The greater the number of revolutions made per minute by the fly-wheel, the more swiftly will the driving wheels of the carriage be turned by the intermediate gearing, and the greater will be the distance covered in a given time. The number of revolutions made by automobile motors varies between 600 and 1,200 per minute; the average motor makes between 800 and 900 revolutions. In all modern automobiles the number of revolutions can be increased by means of an "accelerator." If the motor be constantly run at maximum speed it must soon deteriorate, for which reason the careful automobilist will push his carriage to the utmost only when he is ascending exceedingly steep grades or when it is necessary for him to cover a given distance in the shortest possible time. As a general rule, high-speed motors are used only on pleasure vehicles. Heavy trucks, in which tractive force is the main consideration, are usually driven by engines which make comparatively few revolutions per minute.

Weight is also an important condition upon which the speed of the carriage depends. Often enough it has happened that in ascending a grade one of the occupants of a vehicle has been compelled to alight in order that the motor, already running at its highest speed, might drive the carriage to the summit. Indeed, the motor is sometimes barely capable of driving the vehicle alone up a hill, and the driver himself must perforce walk beside his carriage. It is plain enough that a twelve horse-power carriage weighing only 1,500 pounds will make better time than if it weighed 2,500 pounds, and that a light, two-seated runabout will be speedier than a heavier, four-seated wagon. As an example, heavy autotrucks may be cited, which, although provided with power-

ful motors, run at very low speeds, but develop considerable tractive force. These trucks can transport loads varying from five to ten tons, depending upon the horse-power of the motor. For this reason, French manufacturers are beginning to build wagon bodies of partinium, an aluminium-tungsten alloy of very nearly the same specific gravity as pure aluminium, but of far greater strength.

The speed of automobile vehicles, whether racing machines or otherwise, has been steadily increasing. This is due largely to the public contests held for the last few years in France and other places on the continent. Indeed, it can be truly said that the apparent flourishing condition of the automobile industry in France has been brought about largely by the generally favorable attitude of the French press, aided by the energetic enthusiasm of special publications.

It is a curious thing to see a racing automobile in full career, its *chauffeur* arrayed in leather cap and jerkin with black goggles over his eyes, bent forward so as to offer the least resistance to the wind. While rounding curves at top speed he may be seen leaning far inward so as to offset the effect of centrifugal force. The automobile, it must be remembered, is unprovided with any means for counteracting the effect of centrifugal force. When a railway rounds a curve the inner rail is slightly raised so as to incline the cars within that curve. The wheels are held on the trucks by their flanges. With automobiles, running around curves without inclines, as they mostly do, the centrifugal force tends constantly to throw the carriage from its true course. This force is counteracted only by the friction between the tires and the ground. When the centrifugal force overcomes this friction, as is bound to happen on slippery roads, the equilibrium is destroyed and the carriage, while sliding on its wheels, is thrown without the curve. To apply the brake in such cases would only make matters worse. There is nothing to be done but to correct the equilibrium by counterbalancing devices.

A great outcry has been raised of late against automobile speeding, and various more or less absurd enactments have been brought to bear on it. Thus a judge of the Supreme Court in New York has held that the owners of steam automobiles should be required to send a runner with a red flag ahead of their vehicle to warn other wayfarers, after the manner of dummy engines in large cities. In the vicinity of Boston different restrictions of speed obtain so that



M. Loubet, President of France, (on the Right), Taking a Lesson in Automobiling.

an automobilist spinning through the magnificent park system of Boston can never know whether he is infringing on the particular speed ordinance of that locality, unless he resigns himself to move at a snail pace all the way. In the same city automobilists have been dragged to court and fined for letting their vehicles stand unattended at the sidewalk, although the motive power was turned off and the starting lever detached so as to make it impossible for the waiting automobile to move an inch. In Washington a determined attempt was made by the city government to require all automobiles to

bear licensed numbers like those on dog collars.

Yet Washington has come to be the Mecca of American automobilists. Thanks to its wide, smooth-paved streets and avenues, the capital has become all but a horseless city. This year alone, it has been estimated, nearly a million dollars' worth of automobiles have been purchased by residents of Washington. They are of all styles and sizes. Visits of state are made in automobile victorias and broughams, while cabs, omnibuses and the so-called "autocarettas" have taken the place of horse-drawn public vehicles. Light

runabouts can be seen darting everywhere with occupants bent on grave errands or on pleasure. General Miles, as the president of the new Capital Automobile Club, sets the example for the army, while Admiral Dewey is no less loth to represent the navy with one of the handsomest automobile victorias that is to be seen in the city.

Besides Mrs. Dewey and Mrs. Miles, other prominent lady automobilists of Washington are Madame Wilde, the wife of the Argentinian Minister; Mrs. Hansbrough, wife of the Senator from North Dakota; Mrs. Fairbanks, wife of the Indiana Senator; Miss Hichborn, daughter of the Rear-Admiral, and the Countess Cassini, niece of the Russian Ambassador. Senator Depew, of New York; Wolcott, of Colorado, and Congressman Richardson are likewise owners of automobiles. The most striking *chauffeur* of Washington by all odds is His Excellency, Mr. Wu, Minister of China. In his flowing garments, and with his queue streaming out behind, he flits about Washington on his "no-pushee, no-pulleee" contrivance, which he steers with the fantastic grace and immovable countenance of his race. During the diplomatic *pour-parlers* with China, Mr. Wu's automobile could be seen almost daily awaiting its anxious owner at the entrance of the State Department. President McKinley, although he took an automobile ride while in Ohio a short time ago, has held himself aloof in Washington so far from the prevailing craze of automobilism.

Not so the President of the French Republic, M. Loubet. Like Emperor William of Germany, he had been quick to grasp the possible military advantages of the automobile, and for this reason, as well as others, takes a lively interest in this new industry.

In truth, the automobile affords the most comfortable means, as yet devised, for following army maneuvers. Of still more use than the passenger automobile, however, for army purposes are the heavy road automobiles for transport service. In France experiments have been carried on for the last

three years with the Scotte Automobile, a steam wagon of twenty-seven horse-power, weighing only 6,000 pounds, which can carry 4,000 pounds and draw another load of 12,000 pounds at a rate of five miles an hour. One of these wagons has gone thirty miles an hour under a full load without putting on water or coal. Twenty-four of these wagons can supply an army corps of 30,000



An Automobile Race.

"While rounding curves at top speed, the contestants are obliged to lean far inward so as to offset the effect of centrifugal force."

men with 200 rounds of ammunition per man, over a distance of eighty miles in twenty-four hours; or supply the hundred six-inch guns with sixty rounds each, over a distance of ten miles; or transport twenty-four six-inch guns over a distance of seventy miles in the same time. Take the case of an entrenched camp for an army of 150,000 men, assuming that the distance over which material and stores have to be transported is five miles, and that thirty days are available for the work. With wagon transportation the round trip could be made twice a day. Consequently, over 1,300 horses would be required to transport in the given time the necessary artillery material and supplies of provisions, say about 4,000,000 pounds. In the meantime, these horses would require for their support an immense amount of forage which would otherwise be stored for possible siege use. To replace these horses by automobiles would require some thirty-four machines of twenty-five horse-power. An important factor is that the automobile can transport each load twice as fast as

horses, and could also be utilized more hours of the day for work. Moreover, with two reliefs, the thirty-four automobiles would require only sixty-eight drivers, whereas, the wagons must be manned by 650 men.

Running on a temporary track of rails, such high horse power automobiles could carry the heaviest siege guns on a grade of one and thirty at the rate of seven miles an hour. By means of twenty such automobiles, 300 guns could be brought in position around an entrenched camp in twenty hours.

On the recommendation of General Miles, an automobile detachment has been assigned to the signal corps of the United States Army. They are used in connection with the balloon service and field telegraph. The equipment of these army automobiles is sufficient to run them thirty miles without recharging, carrying a load of 1,500 tons. Independent motors are attached to each of the two driving wheels, and are arranged to develop six horse-power each on grades, or twelve horse-power for the entire wagon. The average speed is ten miles an hour. All the wagons are fitted with attachments for the use of horses in case of unforeseen emergencies. The batteries in such cases are taken out, leaving additional freight room, and can then be used in connection with the field telegraph instruments. The same batteries can be connected with electric search-light for field service.

With all its warlike possibilities, the automobile must ever be essentially a vehicle of peace. A powerful stimulus is given by it to the construction and maintenance of good roads, one of the sorest needs of America. Already the various automobile clubs of America have leagued themselves in joint agitation for better roads. In the words of Maurice O. Eldridge, of the U. S. Commission for Public Road Inquiries: "With the new century, the good-roads movement is receiving valuable aid from the owners of horseless vehicles, already not un-

common on our thoroughfares. The aid of these new allies, added to that of the farmer, with his great pecuniary interest in the question, to say nothing of the army of wheelmen already enlisted in the cause, promises well for a rapid spread of the movement throughout the country."

The matter has already been taken up by the most progressive states of the Union. Massachusetts, following the excellent example of New Jersey, has adopted a system of road improvement which, it is believed, will result in a few years in securing to that state highways that will be second in excellence to none in the United States, and equal to some of the best in the Old World. The state has a permanent highway commission, consisting of three persons. Each year this commission is allowed to spend six hundred thousand dollars for building and maintaining roads, which are called state roads.

Connecticut, likewise, has made rapid progress in building public roads. It now has a highway commission, which obtains an annual appropriation of four hundred thousand dollars or more. The state bears one-half the expense of all roads constructed or improved by its various counties and townships.

The state of New York is less progressive. The state's share in the improvement of highways is fifty per cent. of the cost, the county's share thirty-five per cent. and the town's share the remainder. The boards of supervisors are given the right to decide what roads, if any, are to be improved, thus making the matter of road improvement entirely optional. As a result, the condition of

the roads in general is but poor. Some districts, however, notably those frequented by automobilists, such as Long Island, Westchester County, and Staten Island, can boast of excellent roads.

While the automobile will never quite take the place of horses in the country, the



"Heavy autotrucks, although provided with powerful motors, run at very low speed, but develop considerable tractive force."

long-predicted horseless age will undoubtedly be accelerated by its universal adoption in large centers of population. The elimination of the horse from the big cities entails such sanitary advantages that the horseless era must be looked forward to by all physicians as a public boon. For one thing, it is hoped that it may help to eradicate tetanus—lockjaw as it is commonly called—from the large cities, at least. This disease, though fortunately uncommon, is fatal in its effects, averaging a mortality of seventy-five per cent. Like so many other diseases, the origin of tetanus has been traced to a special bacillus. While in its spore stage, this bacillus propagates in hay, straw and the like, and is thus absorbed by horses with their fodder. The germs do not affect the horse himself, though they find in his intestines an ideal breeding-place, but, multiplying a thousand-fold, they pass out again to dry on the city streets, where they are blown in every direction by the winds.

Besides tetanus, there are other bacilli which propagate in a similar manner. The intestinal bacteria thus fostered are most apt to affect invalids, chronic sufferers from intestinal troubles, and infants. Water, milk and other articles of food become contaminated with these bacteria.

There is another way in which the presence of horses in large numbers has an injurious effect on public health. If the horse

were done away with we should escape in a great measure the plague of flies and other insects which afflict us every summer, and which find their favorite breeding-places in stables. Were the stables removed, this pest would all but vanish with them. Of late, it

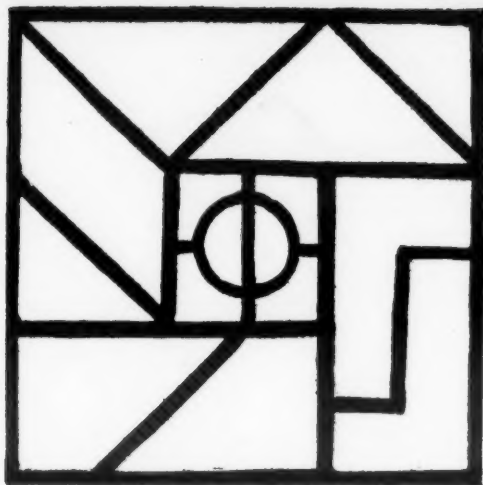
has been demonstrated that certain infectious diseases such as cholera, yellow fever, typhus, dysentery and other intestinal ailments are contagious, not through actual touch, or rarely so, but because of conveyance of poisonous material from the sick to the well through insects. Gelatine plates on which flies and mosquitoes have alighted after access to infected patients, have

been found to swarm with colonies of virulent bacteria.

As Dr. J. J. Walsh has put it in his monograph on *The Automobile and Public Health*: "The automobile should meet with a hearty welcome from the professional sanitarian and all those who are sincerely interested in municipal health. Whatever can be done to advance the day that will usher in the horseless era for our city street, will be just so much done in a great humanitarian cause. It will lead to a distinct lessening of human suffering, as well, be it said parenthetically, to a most welcome diminution of animal suffering, and will prove another link in the chain of sanitary improvements that in our day is lengthening the average of human life so notably, and making it ever more and more liveable, because more healthy."



A. C. Bostwick and Mechanic in Ten-Mile Automobile Club Championship Race.



The Fifteen Magic Blocks [Exact Size] from Which All the Pictures in This Article Can be Made.

CHINESE CHILDREN'S BLOCKS

By ISAAC TAYLOR HEADLAND

Author of "Chinese Mother Goose Rhymes."

ONE bright spring afternoon a Chinese official and his little boy called at our home on Filial Piety Lane in Peking. Father and son were dressed exactly alike: Boots of black velvet; trousers of blue silk, over which hung a long garment also of blue silk; waistcoat of blue brocade and skull-cap of black satin. In every respect, even to the dignity of his bearing, the child was a vest-pocket edition of his father.

The boy carried a t'ao of books, which I recognized as "The Fifteen Magic Blocks." Now, a t'ao is two or more volumes of a book, wrapped in a single cover. The one that the boy had, contained two volumes. On the inside of the cover was a depression three inches square, snugly fitted with the fifteen blocks, which sat together just as represented in the above drawing. These blocks are made variously of lead, wood or pasteboard.

All the blocks are in pairs, except one, which is a rhomboid, and all are exactly proportional, the sides being either half an inch, an inch, an inch and a half or two inches in length.

The blocks of Chinese children are not used as in our kindergartens, simply to

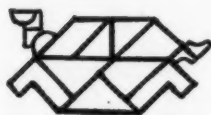
familiarize the child with geometric figures. The more specific purpose of the fifteen magical blocks is to picture scenes of history and myth that will have a moral and intellectual effect on the budding brain. Of course Chinese children build houses, bridges and wagons just as ours do, but, primarily, their blocks are intended for education.

The first picture my child visitor built for me that afternoon was a dragon horse. I asked him to tell me about it. The little fellow explained that this was the dragon horse of Fu Hsi. Fu Hsi was the original ancestor of the Chinese people and he saw this animal emerge from the depths of the Meng River. On the back of the dragon horse Fu Hsi described a map, containing fifty-five spots. These fifty-five spots represented the male and female principles of nature, and out of them the ancient sage used to construct what are known as the Eight Diagrams.

The child tossed the blocks off into a pile and then constructed a tortoise, which, he said, was seen by Yu, the Chinese Noah, coming out of the Lo River, while he was draining off the floods. On its back was a



The Dragon Horse of Fu Hsi.



The Tortoise of the Chinese Noah.



The Old Wife With the Chess-board.

design that Yu took as a pattern for the nine divisions of his empire.

These two incidents are referred to by Confucius and are among the first learned by every Chinese child.

Glancing through the book, I noticed that many of the designs were aimed to amuse the children, as well as to develop their ingenuity. In the two volumes of the t'ao this child had only the outlines of the pictures that he made with the blocks. But he had also a smaller volume that was a key to the designs. Much of the interest of the book, however, lay in the puzzling character of the pictures.

One picture had a verse somewhat like this:

"The old wife drew a chess-board
On the cover of a book;
While the child transformed a needle
Into a fishing-hook."

Chinese folk-lore is full of examples of men and women that applied themselves to books with untiring diligence. Some tied their hair to the beam of their humble cottage, so that when they nodded with sleepiness the jerk would awaken them and bring them to time. Others slept upon globular pillows that, when they became so restless as to move and toss the pillow from under their heads they might get up and study.

The child once more took the blocks and pictured a boy who was too poor to have candles. He therefore confined a fire-fly in a gauze lantern, using that to give him light instead of a lamp. At the same time the child told me of another poor boy not able to have even the gauze lantern. This one studied by the light of a glow-worm.

"K'ang Heng," said the child, as he put the blocks together in a new form, "had a still better and

cheaper way. His house was built of clay, and as the window of his neighbor's house was just opposite, he chiseled a hole through his wall, and thus took advantage of his neighbor's light.

"Sun K'ang's method was very good for winter," said the child, as he re-arranged his blocks, "but I do not know what he did in summer. He studied by the light reflected from the snow.

"Perhaps," he went on, as he changed the picture, "he followed the example of another who studied by the pale light of the moon."

"What does that represent?" I asked my visitor, pointing to a child with a bowl in his hand, who might have been going to the grocer's.

"Oh, that boy is going to buy wine."

The Chinese have not realized what a national evil liquor may become. They have little wine-shops in the great cities; but they have no drinking houses corresponding to the saloon. It is not uncommon to see a child going to the wine-shop to fetch a bowl of wine. The Buddhist priest indulges with the same moderation as the gentry or official class. Most of the drunkenness we read about in Chinese books is that of poets and philosophers, and in them it is, if not com-

mended, at least, not condemned. Mrs. Carrie Nation in China would be out of work. The child constructed the picture of a Buddhist priest who, with staff in hand and a mug of wine, viewed the beautiful mountains in the distance. Then he changed it to one showing an intoxicated man leaning on a boy's shoulder, telling me at the same time, "Any one is willing to assist a drunken man to return home."

"This," he went on, as he changed his blocks, "is a picture of the greatest of China's poets. He has had



The Boy Who Studied by the Light of a Fire-fly.



The Boy Who Studied by Light Reflected from the Snow.

more readers than any other poet in the world. His name was Li Pei, and he lived more than a thousand years ago. This represents the closing scene in his life. He was crossing the river in a boat, and in a drunken effort to get the moon's reflection

Over one he repeated a verse somewhat like this:

"Alone the fisherman sat
In his boat by the river's brink;
In the chill and cold and snow,
To fish, and fish, and think."

Then he turned to two on opposite pages and as he constructed them he repeated:

"In a stream ten thousand li in length,
He bathes his feet at night,
While on a mount he waves his arms,
Ten thousand feet in height."

The ten thousand li in the one couplet correspond to the ten thousand feet in the other, while the bathing of the feet corresponds to the waving of the arms. Couplets of this kind are always attractive to the Chinese child, as well as to the scholar. Poems and essays are replete with such constructions.

The child enjoyed making the pictures. I tried to make one, but found it very difficult. I was not familiar with the blocks. It is different now. I have learned how to make them; but it seemed then as though it



K'ang Heng Who Studied by His Neighbor's Light.



The Boy Who Studied by the Light of the Moon.



The Buddhist Priest With Staff and Mug of Wine
Admiring the Mountains.

from the water, he fell overboard and was drowned. The inscription is:

"The sail being set,
He tried to get
The moon from out the main."

I noticed a large number of boat scenes and induced the child to construct some of them. He was quite willing to do this, explaining them as he went, as readily as our children would explain "Old Mother Hubbard" or "The Old Woman That Lived in Her Shoe."



"Anyone is willing to assist a drunken man to return home."



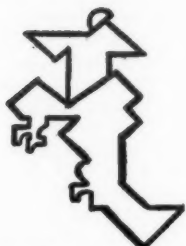
Li Pei, China's Greatest Poet, Drowned While Trying
to Get the Moon's Reflection from the Water.



"Alone the fisherman sat,
In his boat by the river's brink;
In the chill and cold and snow,
To fish, and fish, and think."



"In a stream ten thousand li in length,
He bathes his feet at night;



"While on a mount he waves his arms,
Ten thousand feet in height."



Chang Ch'i, the Poet, and his Boy.



Chang Ch'ien in Search of the Source of the Yellow River.

would be impossible ever to learn. When I had failed to make the picture I turned the blocks over to the boy. In a moment the picture was made.

"Who is it?" I asked.

"Chang Ch'i, the poet.

Whenever he went for a walk he took with him a child, who carried a bag in which to put the poems he happened to write. In this picture he stands with his head bent forward and his hands behind his back, lost in thought. The child stands near with the bag."

Again, there is the story of the great traveler, Chang Ch'ien, and his search for the source of the Yellow River. In this illustration the child represents him in his boat in a way not very different from that of the artist.

Another quotation from one of the poets was illustrated as follows:

"Last night a meeting I arranged
Ere I my lamp did light,
Nor while I crossed the ferry
feared
Or wind, or rain, or night."

The child's eyes sparkled as he turned to some pictures of children at play, and as he constructed one that represents two children swinging their arms and running, he repeated:

"See the children at their play
Gathering flowers by the way."

In another he represented a child standing before the front gate where he had knocked in vain to gain admission. As he finished it, he said, pointing to the apricot over the door:

"Ten times he knocked upon the gate,
But nine they opened not.
Above the wall he plainly saw
A ripe red apricot."



"Nor while I crossed the ferry feared
Or wind, or rain, or night."



"See the children at their play,
Gathering flowers by the way."



"Ten times he knocked upon the gate,
But nine they opened not.
Above the wall he plainly saw
A ripe red apricot."



"The rustling of the swallow's wings
Betokens winter ended."



"A Buddhist lantern will reflect light enough to illuminate the whole universe."



The Founder of Taoism Riding Through the Han Ku Pass on a Cow.



The Ancient Empress Weaving.

Then he made a cottage. This was not made for the picture's sake, but to impress a sentence upon the child's mind. The verse is:

"The ringing of the evening bells,
The moon a crescent splendid,
The rustling of the swallow's wings,
Betoken winter ended."

The child looked up at me significantly as he turned to one which represented a Buddhist priest. I expected something of a joke at the priest's expense, as in the Chinese nursery rhymes and games; but there was none. The inscription said that "a Buddhist lantern will reflect light enough to illuminate the whole universe."

"What is that?" I asked, as he turned to a picture representing an old man riding on a cow.

"That is Lao Tzu (the Old Boy), the founder of Taoism, crossing the frontier at the Han Ku Pass between Shansi and Shensi. Nobody knows where he went."

There were other pictures of Taoist patriarchs tending sheep. By their magic power they turned the sheep into stones when they were tired watching them, and again "the stones became sheep at their call." Still others represented them in search of the elixir of life, while others show them riding on a snail.

The object of bringing in incidents from all Buddhist, Taoist, Confucian and other sources is to cater to all classes, so that the

book may have a wide sale. Whatever the Confucianist may say, it must be admitted, that the other religions have a strong hold upon the popular Chinese mind.

The last twenty-six illustrations of the book represent various incidents in the life, history and employment of women.

The first of these is an ancient empress

"Weaving at night by her palace window."

Another represents a woman "wearing a pomegranate-colored dress riding a pear-blossom colored horse."

The fisherman's wife is represented in her boat "making her toilet at dawn using the water as a mirror," while we are told also that the woman sitting upon her veranda "finds it very difficult to thread her needle by the pale light of the moon," which few, I think, would question.

In one of the pictures we are told that "in the bright moonlight a beautiful maiden came beneath the trees." This is evidently contrary to Chinese ideas of propriety, for the "Classic for Girls" tells us that:

"When the day is dead and buried,
And the moon is very small,
As a maiden in the darkness you should never walk at all,
If to go is necessary, you should summon as a guide
A good servant with a lantern who will linger at your side."

But as this picture says it was bright moonlight, let us hope she was excusable.

This sauntering about in the court is not



A Woman Riding a Horse.



The Fisherman's Wife Using the River as a Mirror.



The Old Woman Finds it Difficult to Thread Her Needle by the Light of the Moon.



"In the bright moonlight a beautiful maiden came beneath the trees."



"As near the middle summer-house The maiden sauntered by, Upon the jade pin in her hair, There lit a dragon-fly."



The Rich Man's Daughter Who Married a Poet and Tended His Wine-shop for Him.

uncommon in these books, for in the next picture we are told that:

"As near the middle summer-house
The maiden sauntered by,
Upon the jade pin in her hair
There lit a dragon-fly."

The next illustration represents the wife of the famous poet, Su-ma Hsiang-ju, in her husband's wine-shop.

This poet fell in love with the widowed daughter of a wealthy merchant. The result was that the young couple eloped and were married, and as she was disinherited by her irate parent, she was compelled to wait on customers in her husband's wine-shop. In spite of their imprudent conduct and its unhappy results, after the poet had become so famous as to be summoned to court the stern father relented, and as it was a case of undoubted affection, they have always had the sympathy of the whole Chinese people.

One of the most popular women in Chinese history is Mu Lan, the Chinese Joan of Arc. Her father, a great general, being too old to take charge of his troops, and her brothers too young, she dressed herself in boy's clothing, enrolled herself in the army, mounted her father's trusty steed, and led his soldiers to battle, thus bringing honor to herself and renown upon her family.

We have already seen how diligent some of the boys were in study. This diligence, however, is not universal. Here we have the

mother of Liu Kung-cho, who, in order to stimulate her son to study, took pills made of bear's gall and bitter herbs to show her sympathy with her boy and lead him to feel that she was willing to endure bitterness as well as he.

The last of these illustrations of women is the wife of Liang Hung, a poor philosopher of some two thousand years ago. An effort was made to engage him to Meng Kuang, the daughter of a rich family, whose lack of beauty was more than balanced by her remarkable intelligence. The old philosopher feared that family pride might cause domestic infelicity. The girl, on her part, refused to marry any one else, declaring that unless she married Liang Hung, she would not marry at all. This touched the old man's heart and he married her. She dressed in the most common clothing, always prepared his food herself, and to show her affection and respect, never presented him with the rice bowl without raising it to the level of her eyebrows.

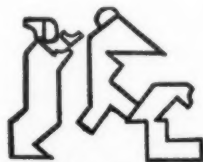
Such is, in general, the character of the book the official's little boy had with him. I afterward secured several copies for myself and learned to make all the pictures first made by the child, and I discovered that it is published in various forms and has gone through many editions. My own contains 216 illustrations such as I have given here.



Mu Lan the Chinese Joan of Arc.



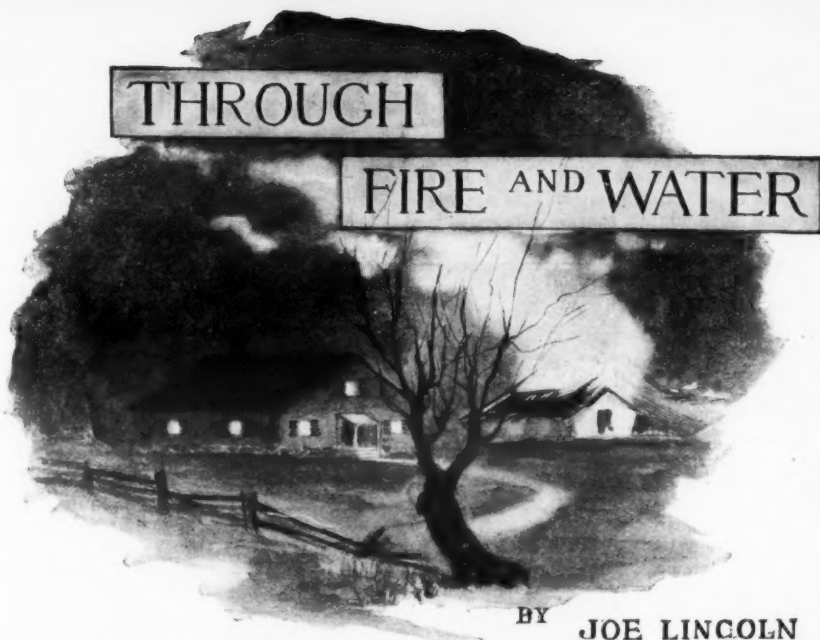
The Mother Who Ate Bear's Gall to Stimulate Her Son to Study.



The Rich Wife of the Poor Philosopher Raising Rice-bowl to the Level of Her Eyebrows Before Serving Him.

THROUGH

FIRE AND WATER



BY JOE LINCOLN

"PASHY," said Cap'n Perez, turning red and hesitating, "d'yer know what a feller told me 'bout you?"

Cap'n Perez was about to undertake a compliment, and, as he was rather afraid to shoulder the entire responsibility of the same, he prefaced it with the pleasant fiction, "a feller told me."

"No, I'm sure I don't, Perez!" said Miss Patience Doane, smiling sweetly.

"Well, a feller told me that you was the best housekeeper in Orham. He said that the man that got you would be lucky."

Now this was encouraging. The Cap'n had been calling once a week for a year and a half, and never before had he come so near making a sentimental speech. Miss Doane tried her best to blush.

"Land sake!" she said. "Whoever told you such rubbish as that? Besides," with downcast eyes, "I guess no man would ever want me."

"Oh, I dunno!" The Cap'n moved uneasily in his chair, as if he contemplated hitching it nearer to that occupied by the lady. "I guess there's plenty would be mighty glad ter git yer. Anyhow, there's—there's one that—that—I cal'late the fog's as thick as ever, don't you?"

Well, 'tis a true proverb that which tells of faint heart and fair lady. Cap'n Perez

had come over to the life-saving station that afternoon, determined to speak and learn his fate. He had told Cap'n Jerry, just before leaving home, that he should "hail her and git his bearin's if he foundered the next minute." But, as usual, his courage had failed him at the critical moment.

The fact is, the Cap'n was overawed by what seemed to him the vast superiority of Miss Doane over all other women. She was a spinster, fair, plump and a bit under forty. Also she was the sister of Cap'n Luther Doane of the life-saving crew and kept house for her brother at the station. Cap'n Perez had grown weary of bachelorhood soon after his friend married the woman from Nantucket, and, when he saw how happy Cap'n Jerry seemed to be in his new partnership, he envied him. Then Cap'n Eri, the other boarder at the house by the shore, received a flattering offer to go as skipper of a fishing schooner and accepted, so Perez was more lonely than ever.

It was then he met Miss Patience, and struck his colors at the first broadside from her bewitching eyes. Love is like the measles, it goes hard with a man after fifty, and Cap'n Perez was severely smitten. The first time he called on the lady she said, in the course of conversation, that, in her opinion, a man who loved a woman should

be willing to go through fire and water to win her. This remark had greatly impressed the Cap'n.

"Fire and water! That's a turrible test, ain't it, Jerry?" he said to his friend. "But she's a wonderful woman and she's wuth it, and would expect it of a feller. That's what makes me so almighty scary. S'pose 'n I should ask her and she should say, 'Perez, yer say yer care fer me. Well, then, ter prove it, go out and stick your hand inter the cookstove.' Now, mind yer, I think I'd do it—seem's if I would, now—but flesh is weak and I might flunk. Then she wouldn't have me and there'd be nothin' left ter do but tie an anchor round my neck and jump off the dock. Fire and water! that—that's awful!"

So Cap'n Perez delayed, and Miss Patience found need of a good share of the virtue for which she was named.

The life-saving station at Orham is on what is called the "outer beach," and, except at low water, when one may wade or drive over at the ford, is accessible only by boat. On this particular afternoon the Cap'n had been ferried over by some obliging summer boarders, who landed him a mile or so down the beach. From here he had walked to the home of his adored. He found her alone, for, as it was summer, the crew were off duty, and Captain Doane had gone over to the village on business. It had required no great amount of urging to persuade the infatuated lover to stay to tea, and, that meal being over, the pair were seated in the parlor.

"What was it you was goin' ter say?" inquired Miss Patience, by way of giving the Cap'n another chance.

"I was goin' ter say, Pashy, that—that—I asked yer if you thought the fog was as thick as ever."

"Oh, dear me! Yes, I s'pose likely it is," sighed the discouraged lady.

"Luther 'll be kind of late home, won't he?"

"Yes, I'm 'fraid he will. I'm glad you're here ter keep me comp'ny. I should be so lonesome if you wa'n't." This was offered as fresh bait.

"Pashy, I've got somethin' I wanted ter ask yer. Do yer think yer could—er—er—"

"What, Perez?"

"I wanted ter ask yer"—the Cap'n swallowed several times—"ter ask yer—What in the nation is that?"

"Oh, that's nothin'; only the hens squawkin'. Go on!"

"Yes, but hens don't squawk this time of night 'thout they have some reason to. It's that fox come back; that's what 'tis!"

Miss Patience, earlier in the evening, had related a harrowing tale of the loss of two of her pet Leghorns, that had gone to furnish a Sunday dinner for a marauding fox. As the said Leghorns were her

pride, and were looked upon as possible prize winners at the Barnstable Cattle Show, even the impending proposal was driven from her mind.

"Oh, Perez! you don't s'pose 'tis the fox, do yer?"

"Yes, ma'am, I do! Where's the gun?"

"Here 'tis, but there ain't a mite of shot in the house. Luther's goin' ter git some ter-day."

"Never mind. I'll pound the critter with the butt. Come quick and bring a lamp."

The noise in the henyard continued, and when they opened the back door, was louder than ever.

"He's in the henhouse," said Miss Patience. "He must have gone in that hole in the side that had the loose board over it."

"All right!" whispered the Cap'n. "You go round with the lamp and open the door. That'll scare him, and I'll stand at the hole and thump him when he comes out."



"Shielding the lamp with her apron, the proprietress of the outraged Leghorns tiptoed around to the henhouse door."

So, shielding the lamp with her apron, the proprietress of the outraged Leghorns tiptoed around to the henhouse door, while the Cap'n, brandishing the gun like a club, took up his stand by the hole at the side.

Without the lamp the darkness was pitchy. Cap'n Perez, stooping down to watch, saw something coming out of the hole—something that was alive and moved. He swung the gun above his head and, bringing it down with all his force, knocked into eternal oblivion the little life remaining in the finest Leghorn rooster.

"Consarn it!" yelled the Cap'n, "I've killed a hen!"

Just then there came a scream from the other side of the henhouse, followed by a crash and the sound of a fall. Running round the corner, the alarmed Perez saw his lady-love stretched upon the ground, groaning dismally.

"Great land of Goshen, Pashy!" he cried; "are you hurt?"

"Oh, Perez!" gasped the fallen one, "Oh, Perez!"

This pitiful appeal had such an effect upon the Cap'n that he dropped upon his knees and, raising Miss Doane's head in his hands, begged her to say she wasn't killed. After some little time she obligingly complied, and then, having regained her breath, explained the situation.

What had happened was this: The fox, having selected his victim, the rooster, had rendered it helpless and was pushing it out of the hole ahead of him. The Cap'n had struck the rooster just as Miss Patience opened the door, and the fox, seizing this chance for escape, had dodged by the lady, upsetting her as he went.

"Well," she said, laughing, "there's no great harm done. I'm sorry about the rooster, but he was

'most dead, anyhow. Oh, my soul and body! look there!"

Perez turned, looked as directed, and saw the henhouse in flames.

The lighted lamp, which Miss Patience had dropped when she fell, lay broken on the floor and the blazing oil had run in every direction. The flames were making such headway that they both saw there was no chance of saving the building. The frightened hens were huddled in the furthest corner, gazing stupidly at the fire.

"Oh, my poor Leghorns!" wailed Miss Patience. "Them hens I thought the world of and was goin' ter take a prize with! They'll be all burned up! What shall I do?"

Here the lady began to cry.

"Pashy!" roared the Cap'n, whom the sight of his charmer's tears had driven almost wild, "Pashy, don't say another word! I'll save them hens or git cooked along with 'em!"

And, turning up his coat collar, as if he was going into an ice box instead of a burning henhouse, Cap'n Perez sprang through the door.

Miss Doane screamed wildly to him to come back, and danced about wringing her hands. The interior of the building was now a mass of black smoke, from which the voices of the Cap'n and the Leghorns floated in a discordant medley, something like this:

"Hold still, yer lunatics! (squawk! squawk!) Druther be roasted than have me catch yer, hadn't yer? (squawk! squawk!) A-ker-chew! Land! I'm smothered! Now I've got yer! Thunderation! my nose. Hold still! HOLD STILL! I tell yer!"

Just as the agonized spinster was on the point of fainting, the little window at the back of the burning shanty was thrown open and two hens, like feathered comets, shot through it. Then the red



"The window was thrown open and two hens like feathered comets shot through it."

face of the Cap'n appeared for an instant at the opening, as he caught his breath with a "Woosh!" and dived back again. This performance was repeated six times, the skipper's language and the compliments he paid the hens becoming more animated every moment.

At length he announced, "That's all, thank goodness!" and began to climb through the window. This was a difficult task, for the window was narrow and the Cap'n was rather wide.

"Catch hold of my hands and haul, will yer, Pashy?" he pleaded. "That's it! Pull hard; it's gittin' kinder sultry in behind here. I'll never complain at havin' cold feet again if I git out of this. Now, then! Ugh! that's it! Here we be!"

He came out with a "plop" like the cork out of a bottle, and rolled on the sand at his lady's feet.

"Oh, Perez!" she gasped, "are yer hurt?"

"Nothin' but my feelin's!" growled the rescuer, scrambling upright. "I read a book once by a feller named Joshuway Billin's. He was an ignorant chap—couldn't spell two words right—but he had consider'ble sense. He said a hen was a darn fool, and he was right. She's all that!"

The Cap'n's face was blackened and his clothes were scorched. One side of the rim of gray whiskers which had encircled his face was singed to a ragged stub; but his spirit was undaunted.

"Pashy," he said, "do you realize that if we don't git help, this whole shebang, station and all, will be burned down?"

"Perez, you don't mean it?"

"I won't swear that I don't! Look how that thing's blazin'! There's the barn beyond it, and the station t'other side of that."

"But can't we fight the fire ourselves and keep 'em from catchin'?"

"I wouldn't dare risk it. No, sir! we've got ter git help from the village."

"But won't some of 'em see the fire and come over?"

"Not in this fog. We can't see the Orham lighthouses ourselves. No; I've got ter go right off. Is the hoss all right?"

"Yes; he's all right; but the buggy's over ter the wheelwright's and there's no other kerridge but the old carryall, and that's almost tumblin' ter pieces."

"I was cal'latin' ter go hossback."

"What! and leave me here alone with the

house afire? No, indeed! if you go, I'm goin', too."

"Well, then, the carryall's got ter do, whether or no. Git on a shawl or somethin' while I harness up."

They were ready in a few moments. The ramshackle old carryall, dusty and cobwebbed, was dragged out of the barn and Horace Greeley, the horse, was backed into the shafts. As they drove out of the yard the flames were roaring through the roof of the henhouse and the lathed fence surrounding it was beginning to blaze.

"Everything's so wet," said Cap'n Perez, "owin' ter the rain this mornin', that it'll take some time fer the fire ter git ter the barn. I think we can git help here in time ter save the station, and mebbe more, if we hurry. I'm goin' ter stop at Joel Bixby's house, that's jest t'other side of the ford, and git Joel and his tribe ter come right over while I go on ter rout out more of the neighbors."

"Hurry all yer can, fer the land's sake! Is this as fast as we can go?"

"Fast as we can go with this everlastin' Noah's Ark! Heavens, how them wheels squeal! Sounds like one of them things we boys used ter make out of a termatter can and a string and call a hoss-fiddle."

"The axles ain't been greased fer I dunno when! Luther was goin' ter have the old kerridge chopped up fer kindlin' in a week or so."

"Lucky fer us and him 'tain't chopped up now. Git dap, slow poke! Better chop up the hoss while he's about it!" The last remark the Cap'n made under his breath.

"My gracious, how dark it is! Think you can find the ford?"

"Got ter find it, that's all. 'Tis dark, that's a fact."

It was. They had gone but a few hundred yards, yet the fire was already merely a shapeless red smudge on the foggy blackness behind them. Horace Greeley pounded along at a jog, and when the Cap'n slapped him with the end of the reins, broke into a jerky gallop that was slower than the trot.

"Stop your hoppin' up and down!" commanded Perez, whose temper was becoming somewhat frayed. "Yer make me think of the walkin' beam in a steamboat. If yer'd stop tryin' ter fly and go straight ahead we'd do better."

They progressed in this fashion for some distance. Then Miss Doane, from the curtailed depths of the back seat, spoke once more.

"Seems ter me this road's awful rough!" she said. "Ain't we most ter the ford?"

The Cap'n had remarked the roughness of the road. The carryall was pitching from one clump of beachgrass to the other, and Horace Greeley had stumbled once or twice.

"Whoa!" commanded the Cap'n. Then he lit a match and, bending forward, scrutinized the ground beneath them. "I'm kind of 'fraid," he said, presently, "that we've got off the road somehow. But we must be 'bout opposite the ford. I'm goin' ter drive down and see if I can't find it."

He turned the horse's head at right angles from the way they had been going, and they pitched onward for another hundred yards. Then they came out upon the hard, smooth sand at the water's edge and heard the ripples lapping on the shore. Then Cap'n Perez got down from his seat and walked along the strand, lighting matches as he went. Soon Miss Patience heard him calling.

"I've found it, I guess," he said, coming back to the carryall. "Anyhow, it looks like it. We'll be over in a few minutes now. Git dap, Thousand Dollars!"

Horace Greeley, gratified, no doubt, by this estimate of his monetary value, waded bravely in. They moved farther from the shore and the water seemed to grow no deeper.

"Guess this is the ford all right," said the Cap'n, who had cherished some secret doubts. "Here's the deep part comin'. We'll be across in a jiffy."

The water mounted to the hubs, then to the bottom of the carryall. Miss Doane's feet grew damp and she drew them up.

"Oh, Perez!" she faltered, "are you sure this is the ford?"

"Don't git scared, Pashy! I guess mebbe we've got a leetle ter one side of the track. I'll turn round and try again."

But Horace Greeley was of a different mind. From long experience, he knew that the way to cross a ford was to go straight



"Port yer hellum, yer lubber!" roared the Cap'n."

ahead; so he kept on. The bottom of the carryall was awash.

"Port yer hellum, yer lubber!" roared the Cap'n, pulling with all his might on one rein. "Heave to! Come about! Gybe! consarn yer! gybe!"

Then Horace Greeley tried to obey orders, but it was too late. He endeavored to touch bottom with his forelegs but could not; tried to swim with his hind ones and found that impossible; then wallowed wildly to one side and snapped the rotten whiffletree in two pieces that floated at the ends of the traces. The carryall tipped alarmingly and Miss Patience screamed.

"Whoa!" yelled the agitated Perez. "Vast heavin'! Belay!"

The animal, as much alarmed by his

driver's howls as by the water, shot ahead once more and tried to tear himself loose. The carryall was now floating, with the water up to the seats.

"No use! I'll have ter cut away the wreck or we'll be on our beam ends," shouted the Cap'n.

He took out his jack-knife and reaching over, cut the straps that held the horse to the shafts. Horace Greeley gave another wallow, and, finding himself free, disappeared in the darkness amid a lather of foam. The carriage, now well out in the channel, drifted with the current.

"Don't cry, Pashy!" said the Cap'n, endeavoring to cheer his sobbing companion. "We ain't shark bait yit. As the song used ter say, 'We're afloat, we're afloat, and the river is free!' I've shipped aboard almost every kind of craft," he added, "but blessed if I ever expected ter be skipper of a carryall!"

But Miss Patience, shut up in the back part of the carriage like a water nymph in her cave, still wept spasmodically. So Cap'n Perez continued.

"The main thing is ter keep on an even keel. Kneel on the seat, and if she teeters ter one side you teeter ter t'other. I think we're carryin' too much sail"—as a faint gust tipped the carriage a trifle. "Let's take a reef in some of them curtains."

So, after some trouble and many screams from Miss Patience, the curtains were furled and the carryall, as its commander said, "scudded under bare poles."

"We're driftin' somewhere," continued the Cap'n. "But we're spinnin' round so that I can't tell which way. We're floatin' with the tide, and that's either jest finishin' goin' out or jest beginnin' ter come in. I remember now," he added, more soberly; "I looked at the clock jest as we was goin' after that confounded fox, and 'twas eight then. Tide's still goin' out."

"Oh, dear! then we'll drift inter the breakers at the mouth of the bay and be drowned, won't we?"

"Oh, no, I guess not!" was the undaunted answer. "There's many a slip between the cup and the coffee pot. We ain't dead yit. If I could git an oar or somethin' ter steer this clipper with mebbe we could git inter shoal water. As 'tis, we'll have ter manage her the way Ote Wixon used ter say he managed his wife—by lettin' her have her own way."

They floated on in silence for some time. Then Miss Patience said:

"What should I have done without you, Perez?"

"Huh! Guess you'd been better off. Yer wouldn't have gone after that fox by yerself and then there wouldn't have been none of this trouble."

"Oh, don't say that! You've been a hero. What a night this has been."

"Well, 'tis kinder unique, as yer might say. When I come over I didn't expect ter put in my time chuckin' chickens out of a red-hot henhouse and then goin' ter sea in a carryall."

The fog grew lighter about them. It was still as thick as ever, but a kind of brightness shone through it.

"Moon's riz," said the Cap'n. "'Member when I took yer out rowin' last summer, Pashy? 'Twas moonlight then."

"So 'twas, Perez"—with a sigh—"but 'twas so diff'rent from this."

It would have been somewhat surprising had it not been different. Now Miss Patience, wet and draggled, was perched on the back seat, with her feet drawn up under her. The Cap'n, even more dilapidated and showing marks of the fire, roosted in a similar fashion on the front seat. The water slopped and splashed just beneath them.

"Do you ever think of that time, Pashy?"

"Oh, often, Perez!"

Perhaps the events of the evening had served to fortify the Cap'n's courage. At any rate, he performed a deed of valor; for reaching across the space between the seats, he took and held Miss Patience's hand.

"Ah hum!" sighed the lady.

"Ah hum!" sighed the Cap'n.

Then the latter had another surprising attack of bravery.

"Don't yer think, Pashy," he stammered, "that mebbe yer wouldn't be quite so lonesome if yer sot here on the seat with—with me?"

Miss Doane opined that, perhaps, she wouldn't be so lonesome there, so, after a great deal of splashing and screaming, the transit was accomplished. The Cap'n was actually sitting upon the same seat as his heart's desire. He had often dreamed of something like it, though never in quite these surroundings. He tried to think of something appropriate to say, but could only murmur that it was a "kinder rough v'yage."

"Yes," said Miss Patience. "But it's nice in a time like this ter have some one with yer that—that yer—that yer know will look out fer, Perez."

Then another wonderful thing happened.

The Cap'n's arm dropped, dropped from the back of the seat and rested about where Miss Doane's apron strings were tied. She did not seem to notice this, although the Cap'n looked guilty.

"The—the v'yage of life," said Cap'n Perez, hitching about as though afflicted with St. Vitus' dance, "is sorter rough in places, ain't it? Seems ter me 'twould be kind of nice ter have somebody with yer all the time ter—ter— Pashy, I'm goin' ter ask yer somethin'. I know it's sudden, but—will—you— Breakers! by jiminy!"

If the couple had not been so absorbed by their dialogue they would, before this, have noticed that the carryall was rocking more than it had hitherto. Now it gave a most alarming heave and there were streaks of white foam about it. It grounded, swung clear, and tipped yet more.

"We're capsizing!" yelled the skipper. "Hang on ter me, Pashy!"

But Miss Doane did not intend to be disappointed this time. As she told her brother afterward, she would have made him say it had they been "two fathom under water."

"What was you goin' ter ask me, Perez?" she demanded.

The skipper turned and caught his breath. The carryall rose on two wheels and began to turn over.

"Pashy Doane," roared the Cap'n, "will you marry me?"

"I will!" screamed Miss Patience, and they went under together.

The Cap'n staggered to his feet and dragged his chosen bride to hers. The water reached their shoulders. And then, as they stood there, the fog, which had grown gradually thinner, rose all round like a curtain. The lights of Orham village showed in the distance, surprisingly far away with the lanterns in the twin lighthouses gleaming like

planets. The waters of the inner bay shone in the moonlight, and there behind them, not a quarter of a mile from where they stood, were the buildings of the life-saving station they had quitted a short time before. And the buildings did not appear to be on fire.

The Cap'n and Miss Patience walked through the swift current and insignificant surf to the beach. The tide had not been going out, but was coming in, and instead of drifting out to the great breakers at the mouth of the bay, they had been carried into the narrows at the entrance to the inlet and upset in the tide race right at their own door.

"But I swan that clock said eight!" vowed the Cap'n, as they hurried up to the house.

"Oh, I know!" exclaimed Miss Patience. "Wa'n't it the dinin'-room clock you looked at?"

"Yes."

"Well, that clock ain't been goin' fer a week. It's broke."

Neither the station nor the barn had caught fire. The back of the latter was heaped high with damp seaweed that Captain Doane intended using as fertilizer, and when the flames reached that they had simply burned themselves out. When the Cap'n and his lady reached the gate there was Horace Greeley waiting for them.

"Well, by jings!" said the Cap'n. "We've had all our fuss fer nothin'!"

"Oh, not fer nothin', Perez!" said Miss Patience, looking tenderly up into his face.

"Well, no! not fer nothin' by a good deal!" cried the exultant swain. "I've got you by it and that's everything. But, say, Pashy!" he added, fingering his burnt whiskers and looking down at his dripping clothing, "I went through fire and water ter git yer!"



"The Cap'n and Miss Patience walked through the swift current and insignificant surf to the beach."

IRON AND STEEL



Photo by courtesy of the *Iron Age*.

Mahoning Mine, Mesaba Range. Mine Shovel Working Frozen Ore.

FOUR hundred years ago the entire world produced and found use for sixty thousand tons of iron annually; to-day it produces and uses forty million tons every year, a growth so marvelous as to surpass belief were it not verified by figures which can not be disputed. Four hundred years ago the United States were not in existence; in 1585 iron ore was discovered in what is now North Carolina, and the first attempt to manufacture it was made in Virginia in 1619. In 1643-45 a blast furnace was built at Lynn, Mass., and three years later a forge was erected. Interference by legislation of the British Parliament stopped the work for a time, but it was resumed later, and in 1740 one thousand tons of iron were produced. In 1790 the United States gave to the world 30,000 tons of iron, and was exceeded among iron producing countries by Great Britain, France and Germany. In 1800 it produced 40,000 tons, tying with Germany; then it went forward at great leaps until 1870, when, with an output of 1,670,000 tons, it had passed France and stood second to Great Britain, the leader of the iron world for four hundred years. For about twenty-five years the two great nations stood in this relation, the United States gaining a little one year to lose it another, but in 1890, after a Titanic race of over one hundred years, we forged to the front and

led the leader of the world of nations with the production of 9,202,703 tons, an increase over the British output of 1,308,489 tons. We held the lead for three years, but in 1894 we lost it to gain it again in 1895, to lose it in 1896; but in 1897 we led again, and again in 1898, and in 1899, with our output of 13,620,703 tons, exceeding that of Great Britain by 4,315,394 tons, we have put our great competitor out of the race. This excess over Great Britain's product is greater than our entire annual output of but fourteen years ago. Verily, for the youngest of the great nations we have done exceedingly well, and we shall hold the position we have reached because our youth gives us the advantage of illimitable fields of fuel and ore which are as yet practically untouched and easy of access, while those of the old countries in competition have been worked almost to the limit. Under such conditions, it is safe to predict that the United States will not only lead the world in iron production, but in time will supply all the nations of the earth with their iron. That this country has so rapidly reached first place and already produces nearly thirty-five per cent. of the world's product is earnest of what it can do when its full energies and resources are brought into active operation.

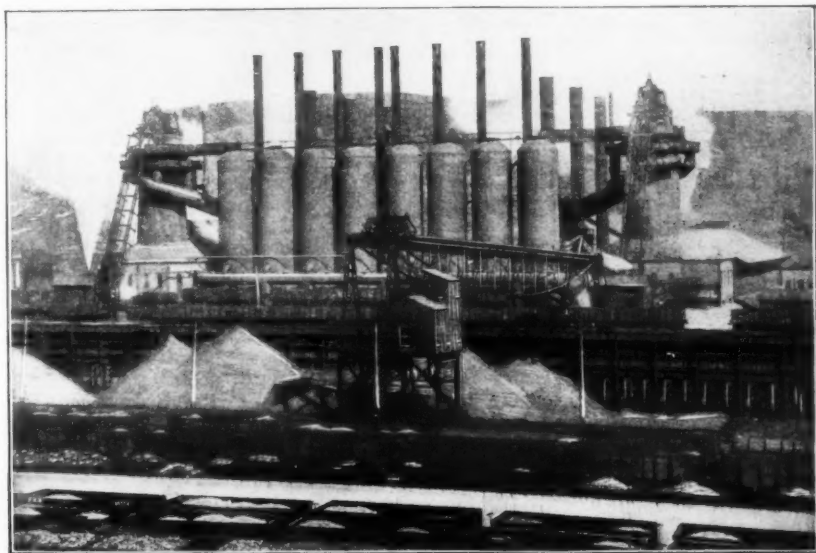
Although in 1500 there were but 60,000 tons of iron produced in the world, so tre-

mendously has its use grown in every branch of human need and industry that in the four hundred years since that time eight hundred and fourteen million tons have been produced and consumed, the United States producing about twenty-two per cent. of the entire amount. In 1830 the consumption of iron in the United States was thirty-five pounds per capita of the population, the number of that year being 12,866,000 and our iron production 180,000 tons; in 1900, with a population approximating 80,000,000, the consumption approximates 400 pounds per person, showing that the United States, as has the world for thousands of years before it, unanimously and liberally acknowledges the supreme usefulness of iron.

When iron was first discovered and by whom and where can never be known, for like air and water, it seems to have been one of the elements, although, except in rare instances, and those chiefly furnished from meteors in the shape of aerolites, iron is not found in a pure state. Even the derivation of its name is not clear. As far back as Tubal-Cain, of the sixth generation from Adam, say about 3,800 years before Christ, we read of iron, and this son of Lamech was not only a worker in iron himself, but "he was an instructor of every

artificer in brass and iron." Thirty-two hundred years later Jeremiah refers to iron mines in this language: "Shall iron break the northern iron and the steel?" and this "northern iron" came from the shores of the Euxine Sea, one of the earlier sources of the iron supply of the Greeks and Romans, although the Greeks claim the discovery of iron on Mt. Ida eight hundred years before Jeremiah's time. All through the Bible iron is mentioned, and it was used for tools, for swords, for chariots, for plows and for numerous other purposes where no other material would so well answer. The steel referred to above, and on three other occasions in the Bible, means copper, as steel was not known until comparatively recent times. Still with its superiority in all the industrial appliances so easily exemplified, its production was very small for 5,000 years after Tubal-Cain worked at his forge in the valley of the Euphrates.

As we now know iron it is divided into three qualities or chemical conditions, pig or cast iron, wrought iron and steel. Pig iron is the rudimentary or raw condition made directly from the ore in a blast furnace, and derives its name from the shape of the bed or mold into which it is run in its molten state from the furnace, representing a litter of pigs at their maternal feeding. It is



The Duquesne Furnaces, Duquesne, Pennsylvania. A Plant of the Carnegie Steel Company.



Homestead Steel Works, Munshall, Pennsylvania. A Plant of the Carnegie Steel Company.
 Photo by Baker Art Gallery, Columbus, Ohio.

readily fusible, unweldable and brittle, and contains two per cent. or upwards of carbon. Steel is cast iron worked in a puddling furnace (by the old methods) until it contains only from .4 to 1.8 per cent. of carbon; it is fusible, ductile and weldable. Wrought iron is cast iron puddled until it contains only from .3 to .4 per cent. of carbon, when it becomes weldable, ductile, fusible at a very high temperature, and may be bent into all forms. While wrought iron still has many uses to which neither steel nor pig iron is applicable, steel has almost supplanted it, notably in the matter of rails, nails, wire, bars, plate and for all structural purposes.

While statistics of blast furnaces in earlier times are scarce, it is known that the Sterling Furnace, in Orange County, N. Y., as early as 1751 made 1,500 tons a year, and it was from this product that the great chain, thrown across the Hudson River at West Point to obstruct the passage of British ships, was constructed. Ordinarily, however, blast furnaces were very primitive affairs, having only water power and wooden blowing cylinders with leather heads moving up and down in them to produce sufficient blast to keep the fires going in the stacks. Such furnaces made from two to four tons of iron a day, and it was not until as late as 1870 that the fifty-ton furnace appeared to astonish the iron-makers of the older period. In these days of iron-making the furnaces, with improvements that would astound the pioneer, turn out from 200 to 700 tons of pig iron daily, thus accomplishing in one day what their primitive predecessors required almost a year to perform. Is it any wonder that our iron product should have increased from hundreds of tons annually to millions?

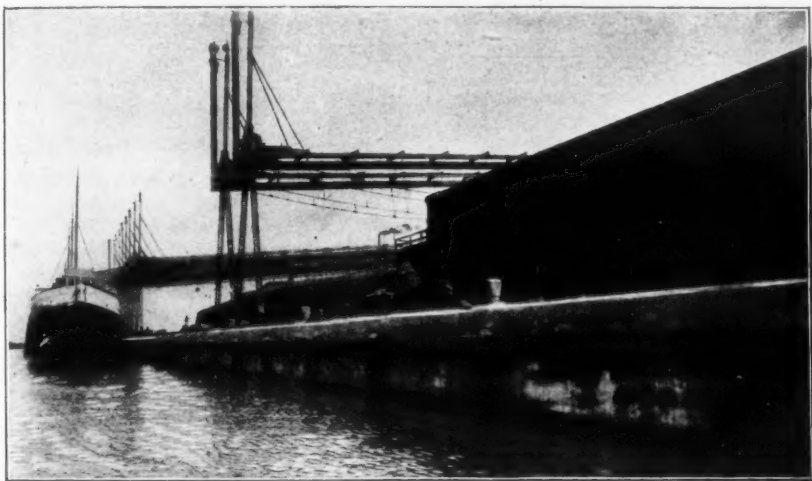
There are at present in the United States 414 blast furnaces, 289 of which were in operation at the close of 1899. As many that were out of blast at that date will never resume again, and as others were not continuously operated, the average output of a modern furnace in this country, turning out nearly fourteen million tons of iron annually, is not exactly ascertainable, but it may be safe to put the number of working furnaces at 350, and we find that each turns out 38,620 tons per year. Allowing 300 working days to the year, this will give an average of 128 tons a day for each furnace, as against an average of four tons a day for the old-time furnace. In the earlier production of pig iron charcoal was the exclusive fuel used, but as the timber became scarcer, and our vast deposits of coal were developed, coal in the form of coke, though some raw coal is used, took the place of wood, so that to-day but 284,766 tons of charcoal iron is produced.

It may be estimated that in making the 13,620,703 tons of pig iron produced in 1899, 25,000,000 tons of ore were smelted, 15,000,000 tons of fuel were consumed, and 7,000,000 tons of limestone were required in fluxing, all of which, except a small amount of imported ore, were produced in the United States, showing the vast amount of money and labor directly required in the work. Pig iron is produced in twenty-one states of the Union, Pennsylvania leading with 6,558,878 tons, nearly half of the entire product, while Massachusetts produces but 2,476 tons. Minnesota has but one furnace, though the state produced 8,397,-

886 tons of ore in 1899. The principal iron-producing states are Alabama, Michigan, Wisconsin, Missouri, Pennsylvania, New Jersey, New York, Connecticut, Virginia, Tennessee. Pennsylvania furnishes the largest amount of fuel, although coal is found in all of the states. Alabama, by reason of her advantages of a cheap labor and fuel, sets the price of the product.

In the earlier history of iron making, furnaces occupied great tracts of timber and ore lands, from 10,000 to 20,000 acres being no unusual territory. Each furnace was thus a city unto itself, the "manager" being somewhat in the nature of a patriarch to his people, and the directing mind of all

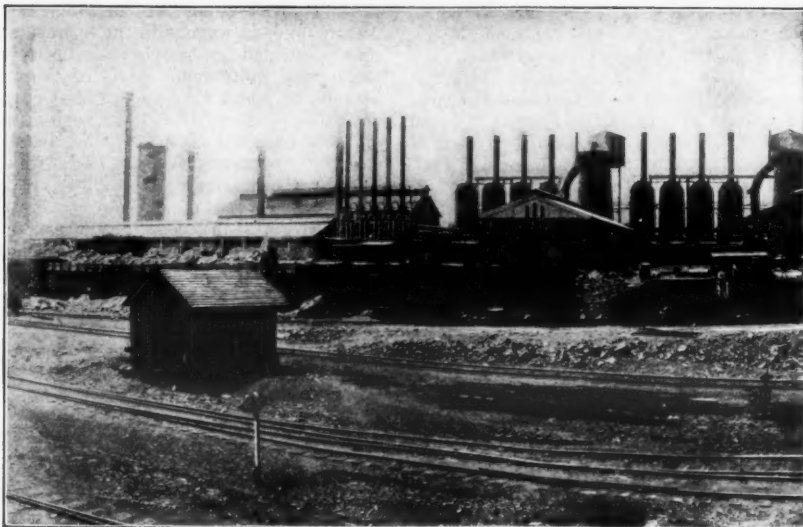
product often being hauled from ten to fifteen miles in wagons to the nearest shipping point, and the people lived entirely by themselves, quite independent of the world outside, of which they knew almost nothing and cared no more. During the winter scores of wood-choppers came in from the back country, frequently as far as a hundred miles, and, cabining in the hills, chopped thousands of cords of wood to be converted into charcoal. In these days the country furnace is scarcely known, as all the great plants are located in cities and towns at their shipping points, and the old-time relationship of employer to employee does not obtain.



Docks of the Illinois Steel Company for Unloading Ore, at South Chicago.

about him. The little community, consisting of fifty or sixty families, remotely situated, looked to the manager for all its wants, and he supplied them as he saw fit. There was no officer of the law on the place, and little need for one; the furnace store supplied food and clothing; there was a school teacher, and sometimes a postmaster, selected by the manager, but there was no doctor and no preacher, save the circuit rider; no money was paid for labor, and there were no strikes; there was no house-rent to pay, and every house had its garden, its pig pen, and its cowshed; there was a carpenter shop and a blacksmith shop, but no shoemaker shop, or shop of other artisan; the furnace was remote from neighbors, its

Prices of pig iron have always fluctuated, and they have not infrequently been the subject of legislation, the iron industry, because of its importance, demanding protection in the form of tariff laws. It is said that every iron man in the country was practically a bankrupt at the beginning of the Civil War, but that struggle had an immediate effect upon the iron interests, and prices hurried upward from ten and twelve dollars a ton to fifty and seventy-five and even higher. One instance I may note in the Hanging Rock region of Ohio and Kentucky, where a firm of furnace owners offered 3,000 tons of iron to satisfy a debt of \$75,000, which three years before would not have paid half the amount. The credi-



The Ensley Furnaces, at

tor, being a friend of the firm, suggested that it hold on a little longer as he was in no hurry, and the iron was finally sold for \$225,000, paying the debt and interest, and leaving the firm a handsome balance. In the early '70s iron was selling at fifty and sixty dollars a ton, but it began to decline after the panic of '73, and twenty-five years later, 100,000 tons of Alabama iron were reported to have been offered to New York bankers, and declined, at \$6 a ton. But better times, or at least better prices, were coming, and gray forge iron quoted at \$9.80 a ton in January, 1899, was selling at \$21.50 in November of the same year, an advance of 119 per cent. in ten months. A corresponding increase occurred in all other branches of iron-making, and the first half of 1899 was "booming" for the iron business. During the latter part of the year prices have declined very materially, and the natural result of too much "boom" has followed the figures that startled the iron world. That abnormal prices should prevail in any commodity of such universal use as iron is not possible, and although high water figures may appear at times by reason of unusual trade conditions at home or abroad, prices under, rather than over, must finally obtain and continue.

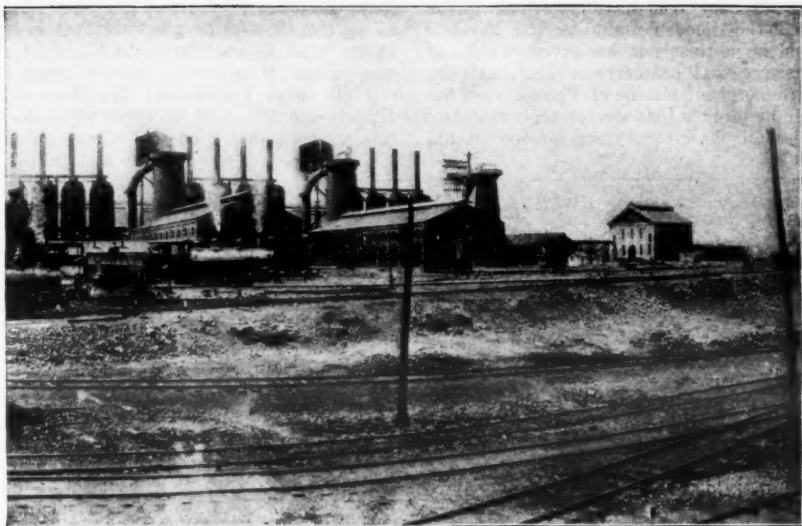
The following table gives the iron production of the United States by decades

since 1790, the earlier figures being estimated:

YEAR	TONS
1740	1,000
1790	30,000
1800	40,000
1810	55,000
1820	110,000
1830	180,000
1840	290,000
1850	560,000
1860	820,000
1870	1,665,179
1880	3,835,191
1890	9,202,703
1899	13,620,703

The total output for 1899 was 39,410,000 tons, the United States making more than all the remainder of the world except Great Britain and Germany.

Wrought iron, which once, with cast iron, composed the entire iron product, has been so displaced by steel that it scarcely receives separate recognition now in iron statistics. It still has many uses in manufacture, but steel is gradually encroaching upon its domain, and the time may come when the word wrought iron will have no recognition except in the arts, for the softness, ductility and tensile strength of this product of iron



Ensley, Near Birmingham, Alabama.

gives it artistic potentialities not possible to its hard and brittle congeners.

And what of steel? The first half of the nineteenth century was known as the iron age, steel being little used owing to the difficulty and cost of its manufacture by the methods then known. In 1850 the total steel output of the world was but 71,000 tons, but the restless energies of man found in it such qualities of usefulness, such possibilities of application to the world's needs, that they permitted no cessation of their search for the magic alchemy that was to make steel the universal metal. Bessemer, Siemens, Martin, Mushet and dozens of others of less note were devoting themselves to the work, and in 1856 Henry Bessemer, an Englishman, later Sir Henry Bessemer, introduced a process of decarbonizing pig iron and converting it into steel by blowing air into the molten metal in the furnace. Mushet's application of *spiegeleisen* to restore the proper per cent. of carbon perfected the process, and the Bessemer steel of to-day was the result. Six years later the first steel rails were made in England, seven years later, in June, 1867, the first Bessemer steel was made in America at Steelton, Pa., and in August of the same year the first steel rails were made at Johnstown, Pa. In that year 3,000 tons of steel were produced in this country, 2,550 of which

went into rails. In 1899, thirty-two years later, the United States produced 10,639,859 tons of all kinds of steel, 2,270,585 tons of which were rails. While this stupendous growth was taking place in this country, the old world was coming on apace, and in 1899 Great Britain, our chief competitor, produced five million tons, an increase of 4,960,000 tons over her product of 1850, and still less than half the product of the United States. Truly, the time is well called the steel age, and the iron of the first half of the century is no longer qualified to give titular distinction to the second.

The production of cheap steel (by Bessemer, open hearth, crucible and other processes) has not only brought it into universal use in the older applications of iron in the industries, but has encouraged the development of newer necessities until the ingenuity of man is taxed to discover some further use to which it may not be applied. From a watch spring, so finely drawn as to be almost imponderable, to a mighty warship, weighing thousands of tons, is a wide reach, but steel spans it as easily as a fairy steps from a sunbeam to rosebud, and the tiny spring and the giant ship are one in the material of their being. Steel has made possible the "sky-scraper," that gigantic wonder of modern architecture whose steely skeleton safely carries its garb of stone or

brick; it has given us ships of war beside which the wooden walls of the ancients would be as tinsel; it has given us ships of commerce that can carry in their holds the entire merchant marine of Phœnicia; it has given us bridges that stretch their tentacles across all chasms and cling forever; it has

rods; 759,952,200 pounds were used in wire nails; 190,434,000 pounds were used in cut nails; in all finished forms 10,357,397 tons were used. It is as easy for the tongue to roll off these phenomenal figures as it is difficult for the mind to comprehend their full meaning in the amount of capital and labor required in their production, their far-reaching scope in the world's purposes, and their incalculable power in the progress and material betterment of mankind.

Time was when the most enthusiastic believer in the future of the Great Republic would scarcely have predicted that it would some day be making iron for foreign markets, and no advocate of protection for our "infant industries" would have credited him if he had

given us railways that stand the friction of millions of whirling wheels carrying their millions of tons of freight and their millions of passengers and show no wear, and at every call of man for a bearer of his mightier burdens steel responds and is not found lacking. And not less comprehensive and valuable is it in the lesser and more numerous spheres of usefulness.

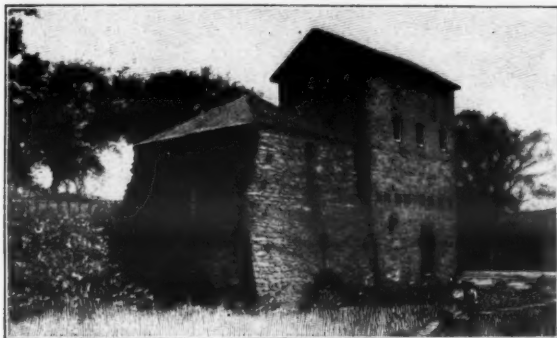
The following table gives the steel production of the United States:

YEAR	TONS ESTIMATED
1808	900
1870	68,750
1880	1,247,335
1890	4,277,971
1899	10,639,857

The total production of steel in 1899 was 27,110,000 tons, the United States making more than all the remainder of the world except Germany.

Of the products of steel and iron for 1899, 906,271 tons were used for structural purposes, bridges, buildings and ships; 1,903,585 tons were used in plates and sheets; 1,099,367 tons were used in wire

done so, yet in 1899 we sent abroad over one hundred million dollars' worth of iron and steel in various forms and received but fifteen million dollars' worth. In the year ending June 30, 1900, we had in-



Albotype photo.

Old Charcoal Furnace, Oxford, New Jersey. Built in 1742.



Albotype photo.

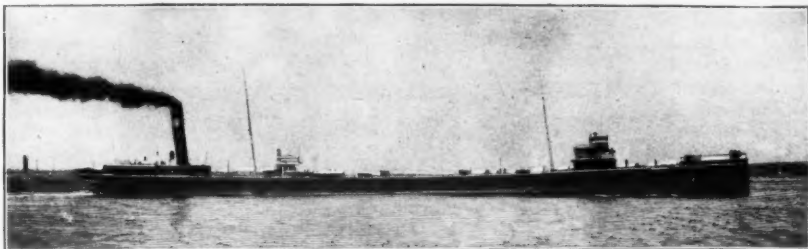
Loading Pig Iron at the Crane Furnaces, Catasauqua, Pennsylvania.

creased our exports of iron and steel to \$125,000,000.

With these astounding figures before us, with our resources but coming to their development, with the old world's facilities for production decreasing as ours increase, who shall say what the new century will

bring forth? The world's population, exclusive of that of the United States, is estimated at about a billion and a half people, one billion and a quarter of whom are prac-

time. The world has a yearly need at present of forty million tons of iron and steel, and of that we are such large consumers ourselves that we cannot spare much of



Fanjoy photo.

Modern Ore Carrying Lake Steamer, *Coralie*. Owned by M. A. Hanna & Company.

tically dependent upon the half dozen great manufacturing nations, of which, in iron and steel as well as in other products, the United States is the leader. Our competitors in the work of supplying the world's needs have been drawing on their resources, limited in the beginning, for centuries, while we, with inexhaustible resources, have been making drafts upon them for scarcely more than half a century. In the nature and logic of events the nations of the world get what they cannot supply themselves from the producer who has what they want in the largest quantity and consequently at the lowest price. That is man's natural bent, and no legislation can change it, although it may delay the exercise of his will for a

our product, but we have the raw material, the money, the labor, the energy and the business sagacity to meet any demand that may come, and when it shall be necessary for us to supply the world with its iron and steel, as it no doubt will be in due time, no man, even to the farthest parts of the earth, need fear that his order will not be promptly filled and the goods delivered.

In every land under the sun American iron and steel are known and used, and when Tubal-Cain, the first iron-maker, comes again to earth seeking for his forge on the banks of the Euphrates, he may expect to be carried along the valley in a palace car over steel rails made by Uncle Sam, the latest and the greatest iron-maker.

LIGHTS

By THEODORE ROBERTS

First the small stars
Shone on the purple vastness of the night,
Then the moon rose
And drowned their pigmy beacons in her light.

Not so my love:
In its clear light the lesser stars grow strong.
At its clear flame
I fire my little altar-lamps of song.



"There is in this city a woman who is contemplating suicide by drowning. The task I set myself is, to find that woman and prevent her from destroying herself."

BEFORE THE FACT

By RODRIGUES OTTOLENGUI

Author of "An Artist in Crime," etc.

I.—MR. MITCHEL'S FIRST PROBLEM

"GOOD-MORNING, Mr. Mitchel," said Mr. Barnes, as that gentleman entered his private office quite unexpectedly one morning. "I am delighted to see you. I had begun to fear you had lost interest in detective work, and that I might never again have the advantage of your valuable assistance."

"On the contrary," said Mr. Mitchel, laying aside his light overcoat and taking the most comfortable chair, "I have decided to play detective for a while, according to my notion of what a detective ought to be."

"Ah! So you will assume the despised rôle in earnest?" Mr. Barnes was greatly interested at the announcement.

"I have criticized detectives as a class," Mr. Mitchel continued. "I have admitted that to some extent you are superior to the others, yet in the main you also have failed. What is your work? A crime is committed, and becomes known. You begin an investi-

gation. Somewhere you pick up loose ends of the threads which, properly followed, unravel the mystery while they weave a net that entraps the criminal. You jail the miscreant, or you hang him. What have you accomplished?"

"What more could be accomplished?"

"Suppose you had detected the criminal before he had committed the crime!"

"I am afraid you are a visionary," said Mr. Barnes, with a smile.

"No! not a visionary, a prophet," answered Mr. Mitchel, quickly.

"Let me see whether I fully comprehend your purpose," said Mr. Barnes, now on his mettle. "You think that the detection of crime after its commission is a matter of slight significance, requiring no great skill. With such endowment as your own, however, you think that the crime should be detected in advance and the criminal thwarted?"

"You express my views accurately."

"And your present purpose, as an object lesson in the science of detection, is to enter upon such an enterprise?"

"It is."

"In that case," said Mr. Barnes, with no attempt to disguise his sarcasm, "and with your exceptional skill, I should imagine that nothing but a crucial test would satisfy you. A crime against property would be too inconsequential. I take it, therefore, that the best means of exemplifying your theory would be to unearth some contemplated killing and thus prevent the loss of a life?"

"You have guessed my intention exactly."

"You mean that you will undertake to prevent a murder?"

"You said killing, and loss of life. I have no doubt that even murders could be prevented. But the case I have in mind just now is suicide. Listen, a moment. I have been studying vital statistics, and I have made a discovery, familiar to criminologists, but perhaps unsuspected by our police. Roughly speaking, and overlooking accidents, death is caused by disease and by crime. In the deaths caused by disease, very accurate statistics have been kept, with the result that we have what is called the death rate, which is the annual proportion of deaths to each thousand of population. The proportion is kept not only of death in general, but we have specific rates for the various diseases. By comparing the death rate from year to year, let us say of typhoid fever, it has been possible for medical men to know certainly what influence they have had in checking that scourge. On the other hand, the rapid increase of the rate for a number of consecutive months in a certain locality a few years ago aroused the physicians of that section to unwonted effort, with the result that the source of the infection was found, the causes eradicated and the death rate lowered. So much from the medical statistics. A study of deaths from crime shows a different condition. We find, for example, that in spite of our death penalty, the death rate from murder is slowly but surely increasing. The statistics as to suicide, however, are

most remarkable. I find that in this city the rate has remained absolutely stationary for more than twenty years! You do not at once grasp the force of that statement?"

"Perhaps not. Go on."

"The statistics have not been tabulated in this country as in France, but the records are complete, and I was courteously allowed to make my own studies, led to do so by the remarkable deductions from the Paris statistics. Over there the suicide rate has been stationary for three decades. More than that, in every sub-classification the figures have remained unchanged. Thus we find the same number of male and female self-murderers annually, accomplishing their purpose by selecting methods in the same ratio. By that I mean that the same number hang themselves, poison themselves, drown themselves, shoot themselves, stab themselves, and so on. We may even go further, and in the poisoning we find the same ratio of selection; the same use of carbolic acid, of strychnia, of morphine, of arsenic, and so forth. Do you not find this statement remarkable?"

"I do, indeed. But what do you mean by the same number? Not literally the same number?"

"No! Proportionately the same number. Thus by taking the rate per thousand and multiplying by the number of thousands of population we arrive at the aggregate number of suicides in a stated period. The classification of methods has been possible only by decades, the rate per year being too small. Thus in the Paris statistics comparison was made during three successive periods of ten years, beginning with 1865, and the ratios coincided with great accuracy. But the calculation was carried even further and decades were studied and compared, beginning with 1866, then 1867 and so on, bringing the figures down to the end of 1899. The results were in all cases the same."

"But that seems marvelous."

"Yes, and it shows that the mode of life in Paris produces a definite number of suicides annually."

"You said, I think, that



Mr. Mitchell.

you have studied out the statistics for New York City?"

"Yes. The suicide rate is much lower, due undoubtedly to the difference between the Anglo-Saxon and the Latin temperament, the latter being the more sentimental and impulsive. Temperament, however, having exerted its influence in lessening the rate, other influences seem to be as potent at work here as in Paris. That is to say, the rate has been stationary for twenty-five years, and we find the same coincidence of ratios between the sexes and as to methods chosen."

"This is most extraordinary. But tell me, how is this to operate as a clue to the work which you mean to attempt?"

"My own tables, like the French statistics, terminate with 1899. Taking the ratios, and applying them to the present year, 1900, I find the adaptation of the figures to the already recorded results to be marvelous in the extreme. But I have met one fact which has attracted my intense interest. Multiplying the ratio for women by the computed number of thousands of population, I find that one more woman must commit suicide in order to answer the demand of the figures. Turning to the method, I find that there is the same lapse under the head of drowning. What is more, I have figured out that this suicide must occur in November, for the statistics have been applied to season as well as to methods. My peculiar clue, therefore, leads to the fact that there is in this city a woman who is contemplating suicide by drowning. The task which I have set myself is, *to find that woman and prevent her from destroying herself!*"

"In which case you will destroy the validity of your statistics," said Mr. Barnes, cynically.

"The statistics of the past will be unaffected. I do not object to decreasing the suicide rate, just as the doctors have decreased the death rate. The statistics of the future will have a different meaning, that is all."

"But, seriously, Mr. Mitchel, you do not mean to take figures so literally, and to believe because statistics show it, that a woman is contemplating suicide?"

"Of course not. The deductions from the statistics have simply supplied me with the inspiration. You understand, of course, that I am not claiming absolute accuracy for the figures, for, in the first place, ratios figured out to the last decimals would give us frac-

tions of individuals committing suicide, while other errors creep in through the fact that the exact population for each year cannot be known. The coincidences, however, are remarkable enough to show that the causes resulting in suicide are inherent with the community rather than with the individual.

"Well, I am curious to know how you will set about your task."

"Read the 'personal' column in the *Herald* to-morrow morning."

On the following day Mr. Barnes glanced through the "personals" in the *Herald* with more than usual interest, and it was not long before he found one which he attributed to Mr. Mitchel. It read as follows:

"Luck has changed; our self-sacrifice not necessary. Do nothing rash. Happiness awaits us. Where can I find you? Address: Life, *Herald*, uptown."

As the Staten Island boat bore the detective to the city he had an abundance of time in which to study this advertisement, and his thoughts were somewhat as follows:

"'Luck has changed; our self-sacrifice not necessary.' 'Self-sacrifice' is ingenious. The ordinary mind will not suspect that suicide is meant, whereas, a person thinking of self-destruction will comprehend at once. But what does he mean by 'our self-sacrifice'? Evidently he has jumped to the conclusion that the woman whom he seeks has agreed with some one that both shall commit suicide. I wonder why he should have complicated his search in that manner? He thus fails to reach any who might be guided by individual purpose. There must be a reason, for Mitchel is no fool, even though he does overestimate his ability. 'Happiness awaits us.' Evidently the other party must be a man. Sweethearts in despair. More restitution. 'Where can I find you?' That is adroit. He gets the woman's address at once, that is, if she does not become suspicious either at the question or from the omission of any name in the address. 'Address Life, etc.' Well, that is not so bad, for of course he could not sign the name, not knowing it, and this is a sort of promise. Well, well, we shall see. I wonder whether he will get any answers at all." At this mental query, he started a little and then seemed absorbed in deep thought.

The day at the office seemed longer than usual to Mr. Barnes. Everything went smoothly; he had good reports from his agents, and made progress in several cases, but none of them was of exceptional im-



"I will not! He already has a wife!"

portance, and consequently did not long hold his interest. As afternoon came and passed, he seemed to be expecting some one. The slightest noise caused him to turn anxiously to the door. If he was looking for Mr. Mitchel he was doomed to disappointment, as that gentleman did not put in an appearance.

If the detective was disappointed on that day, he was not on the following morning, for when he reached his office Mr. Mitchel was awaiting him.

"You saw the advertisement, Mr. Barnes?" Mr. Mitchel asked at once. "How did it strike you?"

"Ingenious but restrictive. I could not make out why you should search for a woman about to kill herself in company with another, and thus eliminate the chance of detecting any other who might have the same act in view?"

"There you go again, with your old-fashioned methods. You must pin your faith to the drag-net system. Arrest a hundred suspicious characters because the criminal might be among them. No, I preferred the scientifically direct method."

"And how does your science indicate that your woman is to commit suicide by suggestion of another party?"

"Ah! now you use the correct word, suggestion. The idea came to me by suggestion, just as I anticipate that this crime has been conceived similarly. Study great crimes more closely, Mr. Barnes, and you will discover one important fact—one suggests the next. The Harris case was followed by the Buchanan murder, both men using morphine to rid themselves of a woman. Jack the Ripper, the undiscovered London fiend, mutilated the bodies of his victims, and straight-way similar crimes were reported in all the

large cities of Europe, and here in New York. This is peculiarly true when the crime is conducted in a novel fashion. To come to the case in point. You will remember the case reported last week? The man, by hypnotic or other influence, persuaded his sweetheart to die with him, and taking her to a room in a hotel he shot her and then shot himself. He died, but the woman lived to give the details of the scheme."

"I see, and you think this may suggest a similar course to some other couple?"

"Not necessarily to a couple, but to one, let us say, to the man. Moreover, it need not follow that he should do the killing, or even that he should himself entertain the idea of death. He might be wishing to rid himself of a woman, and this affair might suggest a means of accomplishing his end. Of course, it is not a certainty by any means, but it is a working hypothesis, and I thought I would follow it, as success would be all the more an evidence of the correctness of my theories."

"Have you received any answers?" asked Mr. Barnes, suddenly, eying his visitor keenly.

"Would you like to read one?" said Mr. Mitchel, returning question for question.

Mr. Barnes expressed a desire to read any letter that might have come in reply. Mr. Mitchel handed him a written sheet from an envelope. Mr. Barnes took it and read the following:

"I read the 'Personal' in the *Herald* this morning with great joy, as it not only gives me a new lease of life, but promises an end to our troubles. I promised you to die at the time agreed on, and I would have kept my word, but I made the promise only because I loved you and would make any sacrifice for you that you might ask. But I did not wish to die and am only too happy that it is not to be, and that I shall see you again. Only one thing worries me. Is the 'Personal' really meant for me? You do not sign any name that I know. If you are my loved one come to me at once and end my suspense. You know where I am if you are my sweetheart, and if you are not there is no need for me to tell you my address or give you my name. But if you do not come to me in two days I shall know my hope is a false one, and I shall end it all."

"Well," said Mr. Barnes, after reading the letter over twice, "you have a letter here that seems to fit your theories most marvelously."

"Most marvelously," said Mr. Mitchel, smiling.

"Why do you smile?" asked Mr. Barnes. "As far as I can see, you have no easy road to travel here. The woman gives no hint of her name or address, and says she must hear

from you in two days or she will kill herself."

"I have still a day and a half."

"But you have no clue?"

"You forget. I have not shown you the envelope in which the letter came, and if you will pardon me, I will not show it to you until I succeed—or fail."

On the second day after this interview Mr. Barnes found a sealed note from Mr. Mitchel on his desk. It read:

"Do not worry about that woman. She will not commit suicide, even though the two days have passed.

"MITCHEL."

Two weeks passed, during which Mr. Barnes neither saw nor heard from Mr. Mitchel, and then he received a letter, which puzzled him.

"If you desire to be present at a most interesting marriage ceremony, one with an unusual *dénouement*, be at No. 80 West Fiftieth Street punctually at two o'clock on Wednesday afternoon.

"MITCHEL."

At the appointed hour, Mr. Barnes mounted the steps of the house in Fiftieth Street. Mr. Mitchel himself answered the bell, and led him into the back parlor. Here he found a gentleman, who from his attire was evidently a clergyman. Seated in the darkest corner of the room was a heavily veiled young woman, in street costume. Mr. Mitchel, in a low tone, introduced Mr. Barnes to the clergyman, and the three stood together whispering, for just then the door bell was rung and a young and stylishly dressed young man was ushered into the room.

"Mr. Matthews, gentlemen," said Mr. Mitchel, and to the newcomer he said in a low tone, "There is the bride awaiting you; you are late. A bad sign."

"I do not believe in signs," answered the young man, laughing. He then turned towards the young woman, whom he approached, and greeted warmly. As she arose, he attempted to embrace her, but, with a light laugh, she eluded him, saying:

"After the ceremony."

"Let us hurry it up then," and turning to the clergyman, he added, "We are ready if you are."

The two stood side by side, and the minister read the marriage service until he reached the usual question to the groom, to which he responded, firmly:

"Yes."

The question was then repeated to the bride, when, to the astonishment of Mr.

Barnes, with even more firmness she answered:

"I will not! He already has a wife!"

With a cry, young Matthews started back and stammered forth:

"What do you mean? I thought——"

"You thought," said the girl, with considerable spirit, throwing back her veil and revealing a refined and beautiful face, "you thought you were dealing with a fool. You thought I would leave my home, my people, at a sign from you. Well, I have been a fool, but, thank God, I have been saved by this gentleman, and now, having played my part, may I go?" The last words were addressed to Mr. Mitchel.

"I will see you to the carriage," said Mr. Mitchel, hurriedly stepping to her side and leading her out, saying over his shoulder to Mr. Barnes, "Don't let that man get away."

But the young man made no effort to escape. He seemed utterly astounded. Mr. Mitchel returned in a few moments, and closing the door behind him spoke at once.

"Now, gentlemen, if you will all sit down, I will explain the situation. You, Mr. Matthews, are not a criminal, that is, not technically. But that is no fault of yours."

"What do you mean? How dare you insinuate——" began the young man, starting up in simulated rage.

"Now, my boy, sit down and keep cool," said Mr. Mitchel. "Let us have no heroics, and remember there are three to one. I said that if you are not a criminal that fact cannot be credited to you. We have just seen that you were willing to commit bigamy. Morally, you have done so, for you spoke the word to bind you in marriage to the woman."

"It is a lie. My wife is dead."

"She is dead?"

"Yes."

"You astonish me. Of course, if that is true, you were at liberty to contract this new marriage, and I have been unwarranted in my interference. When did your wife die?"

"Two weeks ago."

"You surprise me," said Mr. Mitchel, mildly. "How did it occur? Had she been ill long?"

"She committed suicide."

"Suicide?"

"Yes. She drowned herself in the East River."

"When did they find the body?"

"I don't know." Then realizing that he had been led into a serious admission, he

turned upon Mr. Mitchel in real rage, and demanded, "Why do you ask me all these questions? What business is it of yours?"

"Once more," said Mr. Mitchel, "I advise you to keep cool. You are entirely in my power, and"—pointing to Mr. Barnes—"this gentleman is a detective."

"A detective! I had nothing to do with her death. It was suicide." He was thoroughly alarmed, and sank into his seat. A pallor overspread his face.

"Listen to me, young man, and thank your God that you are not to-day accused of a crime. Thank Him, too, that you are not guilty, technically guilty, I mean, of that poor girl's death. Morally you are guilty, but in a sense you escape the clutches of the law because—because your wife is not dead."

"Not dead?"

"No, Mr. Matthews, she has not committed suicide. She has not jumped into the East River. Therefore, you will not be called upon to explain how you knew her to be dead, before the finding of her body."

The young man collapsed utterly, dropping his head into his hands and sobbing bitterly.

"Let me tell you the facts," continued Mr. Mitchel. "Two weeks ago I inserted a 'personal' in the *Herald* intended to reach the eyes of an imaginary woman supposed to be about to commit suicide, and meant to act as a deterrent. I received this reply." He took a letter from his pocket and read as follows:

"Oh Tom! Tom! Thank God for your message. I have seen the *Herald*, and you tell me not only that I may live, but that we are to be happy. Can it be true? Are our troubles at an end? Oh, my beloved one, I pray so. For I do love you, sweetheart, though I may not be all that I ought to be, to be your wife. But when you took me you knew that I was not a fashionable girl, and not your social equal. So you must have loved me or you would not have married me. Then, when we became poor, and you showed me that you could not take me to your people, and that you could not find work, I prayed for you night after night that you should find something. Just enough for us two. Surely, I thought, God will let me keep my little happiness. Then you came to me in despair and told me you would give up the fight, and end it all by killing yourself. You remember how frightened I was, and how I cried, and said I would kill myself instead and that then you could go back to your people. And then you took me in your arms and told me you were going to kill yourself only for my sake. That I was young and pretty and could marry again. Then we talked and talked, until at last we agreed that you would try once more, and that if no luck came to you we would both die on the same day. And we agreed on to-day, and I was to look in the *Herald* for the final word from you to-day, as we thought best not to meet again if—if the worst should come. And now it is to-day, and I have knelt and prayed all night, and at day-

light I went out and got a paper. God has answered my prayer, and we are to live and be happy. Come to me, dear, come at once. But, of course, you do not know where I am, because when we separated I was to leave the house where we were so that no one ever should know who I was when—but that is over. I am at 12x Park Row. It is near the entrance to the Bridge—I thought it would be easier to drop from the Bridge than to jump from a dock, where the water would be so close to me, as I have always been so afraid of the water. But I must stop writing and send this so that you may come quickly.

"Your loving wife

"ELSA."

"Gentlemen," said Mr. Mitchel, when he had finished, "that young woman loves this

"For the sake of your wife, you are to be spared, though for yourself I have nothing but contempt and loathing," said Mr. Mitchel. "You need tell me nothing. I have ferreted out your story. I easily found your wife, and pretended to have come from you. From her I discovered enough about you to find you, and since then I have been occupied in learning your object in attempting to kill your wife. We will not mince words, for that is what you really intended. I found that you were in constant attendance upon the young lady whom you so nearly married to-day. As she is wealthy, apart



"Mercy! mercy!" wailed the young man."

man. Neither of you will doubt that after hearing her letter. What must you think of the man who tempted her to commit suicide that he might be free to marry a rich girl? He left that poor wife in suspense for a week while he pretended to look for work. On the day appointed, unless a 'personal' to the contrary should appear in the *Herald*, she was to go and drown herself. The day arrived, and there was nothing from him in that paper. I ask your judgment. At heart is he not a murderer?"

"Mercy! mercy!" wailed the young man, falling on his knees.

from expectations from her parents, I easily guessed your wish to be rid of the poor wife. I called upon this young lady, and when I explained the whole case to her she admitted that you had sued for her hand, and, at my request, she aided me to the extent of acting as she did this afternoon. However, I have seen your father——"

"My father!" the young man groaned.

"Yes. I have told him of your marriage, and have persuaded him that as the girl is a deserving woman, who loves you, he should forgive you. He has promised me to do so."

Matthews started up and stared about him as though dazed.

"My father will forgive——"

"Yes. Now, go at once to your wife, and love and cherish her in future. She brings you true love, which is rarer than riches. Go to her and take her to your father. See that she has that happiness which she believes you promised her in the *Herald* advertisement."

"How can I ever prove my gratitude?" cried young Matthews. "You have not only saved me from crime, but you have brought me happiness."

He extended his hand, but Mr. Mitchel did not take it.

"I will shake you by the hand, Mr. Matthews, when you have proved that you are once more worthy." Matthews colored deeply and drooped his head. Mr. Mitchel continued, "At this moment, of course, you mean to treat your wife properly. But remember that there are three of us to testify that you were willing to commit bigamy; that three of us have heard admissions from you, which with other evidence in my possession would convict you of attempting your wife's life. Now go to her."

Mr. Matthews slunk from the house, leaving the other men alone.

"Gentlemen," said Mr. Mitchel, "that is all. Mr. Barnes, we will depart, thanking the doctor here for the use of his house, and for his services in performing half a marriage, which, however, will make another marriage whole."

So saying, Mr. Mitchel and Mr. Barnes left the house. On the street, as they walked side by side, Mr. Barnes said:

"Mr. Mitchel, your success in this case has been marvelous, and I must heartily compliment you upon the outcome. There is, however, one point which still puzzles me."

"You mean that the letter which I read to-day is not the one which I read to you in your office?"

"Yes. What have you done in that case? You wrote to me that that woman would not commit suicide."

"Well! She has not killed herself, has she?"

"Why, how should I know?"

"Because you wrote that letter. There was no such woman. You simply took a hand in the game to bamboozle me."

"I would like to know what put that idea into your head?"

"Nothing could give me greater pleasure than to explain. You will recall that I told you when I read the letter to you that I had not shown you the envelope. After inserting my 'personal,' when I called for replies, I found, not one, as I had hoped, but several."

"Several?"

"Yes. One from every private detective agency in town, each offering to find the person whose address I sought, should my advertisement fail to reach her eye. That, of course, is business. One such letter came from your office, written on your stationery."

"The devil," exclaimed Mr. Barnes.

"No, not the devil, but routine, my friend. Once more you are the victim of routine. I suppose that five years ago you told one of your assistants to watch the *Herald* 'personals' and answer them, and it has been done ever since. The alleged letter from the would-be suicide you had written by one of your girls, in pen and ink, remembering with your usual sagacity, of course, that such a person would not be likely to have access to a typewriter. You even made sure that the letter was written on blank paper. You took one of your letter sheets and folded it to make it seem like the note paper of a woman. I also observed with satisfaction that there is no water mark on your stationery. Nevertheless, there was one slip. You gave the letter to one of your girls to address and mail, and she not only used the same kind of envelope for both communications, a white envelope lined with blue, but she actually addressed the letter from the mythical woman, on her typewriter. Force of habit, I suppose. Of course, the similarity of envelopes, and the identical typewriting——"

"Of course! of course!" said Mr. Barnes, testily.

"But there was another thing that operated against you," pursued Mr. Mitchel. "By chance, I received a genuine letter, from a woman really contemplating self-destruction and really finding herself saved from that fate. Compare the two, and you will find that whereas one comes from the heart, the other is the mere output of the brain, and I guessed at once that the brain which sent me a letter fitting all my premises, but denying me the address of the writer, belonged to my good friend, Mr. Barnes."

A POSSUM RIDGE COURTSHIP

By THOMAS P. MOUNTFORT

BEN BRANCH, twenty years of age, tall and gawky, slouched leisurely along a path that led across Caleb Jackson's wood pasture. He wore a broad-brimmed, weather-beaten straw hat, a hickory shirt, and a pair of cotton overalls that hung on him by one suspender. His feet were bare. An old shotgun lay on his shoulder, a bunch of rabbits hung at his side, and five or six dogs followed at his heels.

Lizzie Jackson stood leaning against a fence, silently watching Ben's approach. Her arms were folded on the top rail, and one of her bare feet rested in a crack. She was a year or two younger than Ben, and, unlike him, was short and plump. He did not see her until he was quite close, then, looking up, he said, quietly:

"Howdy, Liz?"

"Howdy, Ben?" she returned, with equal lack of interest.

"How you comin' on?" he asked.

"Jest tol'able, I reckon," she replied.

"How you comin' on?"

"Jest common, I guess. Yo' folks all well?"

"Pap's gruntin' some with his back. Yo' folks right well?"

"All able to git to the table at meal time. Whar you been?"

"Huntin' hicker'nuts. Whar you been?"

"Huntin' rabbits. Can't you see?"

"Uh, huh. Did you ketch all them rabbits you got thar?"

"Co'se. Them ain't many, though."

"Lord! They looks to me lack they's a heap. Must be 'most a half dozen of 'em."

"They is. Jest a half dozen of 'em, edzackly. An' they's fat 'uns, too. Jest heft 'em oncet."

"My, they is heavy, shore. I bet you's proud 'cause you can ketch all them rabbits, ain't you?"

"Sorter. Reckon I'd be a heap prouder, though, if I could ketch somethin' else."

"Would you?"

"Bet I would."

"What else? A b'ar?"

"A b'ar 'u'd be a right smart thing to ketch, but thar's somethin' else wuth mo'n that."

"Lord, I don't know what it kin be."

"I do."

Ben also was leaning against the fence now, his head within a foot of hers, and his eyes fixed intently on her face. Her eyes were bent on the ground and her cheeks were flushed.

"I know what it kin be," he said, in a low voice.

"I don't," she replied, softly.

"I kin tell you, then."

"Wal."

"May I tell you?"

"Co'se."

"You won't keer?"

"What 'u'd I keer fer?"

"Dunno. You mought git mad."

"I ain't no call to git mad."

"You shore o' that?"

"Co'se I am. Don't matter nothin' to me 'bout what you want to ketch."

"It mought."

"Don't see why."

"It mought matter a heap."

"Don't see how it could."

"S'pose it was you I wanted to ketch?"

"Me you wanted to ketch!"

"Uh, huh."

"Lord, what a notion! What 'u'd you want to ketch me fer?"

"Jest fer fun."

"Wouldn't be no fun in that."

"Would, too. Piles of it."

"Guess it wouldn't be no fun to me to be chased down an' shot like a rabbit."

"Don't want to ketch you that erway."

"What you want to do, then?"

"Jest want to ketch you an' keep you."

"What you want to do that fer?"

"'Cause I—mought I tell you?"

"Co'se you mought."

"'Cause I love you."

"Ho, you tellin' a story."

"Hain't, nuther."

"You don't love me."

"Do, too."

"I bet you jest foolin'."

"Bet I hain't."

"What you want to love me fer?"

"'Cause you's—mought I tell you?"

"Uh, huh."

"Reckon you won't git mad?"
 "Co'se I won't. Hain't nothin' to git mad 'bout."

"'Cause you's sweet, then."
 "Huh! You don't know I's sweet."

"Do, too."
 "How you know?"

"Jest know."
 "Folks don't jest know things."

"I jest know that, anyhow."
 "You jest foolin'."

"Hain't, nuther. I can tell you's sweet jest by lookin' at you."

"Ho, you can't tell by lookin' at things whether they's sweet or sour."

"Kin by lookin' at you. I see sweetness jest oozin' out o' your lips."

"You jest barkin' to hear you'self, I guess."

"Hain't. I's tellin' the truth."

"You got to taste things 'fore you kin tell they's sweet."

"I bet yo' lips is sweet, anyhow."

"I bet they hain't."

"I bet they is."

"I bet they hain't."

"How we goin' to tell which is right, I wonder?"

"Dunno, I'm shore."

"You said I couldn't tell 'thout tastin'."

"Can't."

"Reckon I'll jest have to taste 'em, then, won't I?"

"I hain't said you could, have I?"

"Then you don't want me to, do you?"

"I hain't said I don't, have I?"

"Mought I taste 'em?"

"Dunno. Mebby you mought, an' mebby you moughtn't."

"Would you git mad if I did?"

"Wouldn't do no good to git mad."

"Then I'm goin' to smouch you."

"Better not."

"Why?"

"Somebody mought see you."

"Don't keer. Mought I smouch you jest once?"

"Reckon if you want to you kin. You's the biggest, ain't you?"

"Uh, huh."

"Guess I couldn't help myself, then."

"You mought if you tried."

"Not if I didn't try very hard, I reckon."

"Then I'm goin' to smouch you."

He slipped his arm about her, drew her to him, and, after a little feigned struggle on her part, kissed her. They stood for a while, looking at each other, hushed by the bliss that had settled upon them.

Finally he said.

"Yum, yum! I never knowed thar was anything as good as that. Watermelons an' sweet 'taters an' peaches hain't nothin' to it. Yum, yum! Didn't you like it?"

"Hush!" she said, in a soft whisper. "Don't talk to me now. I want to jest be still an' dream 'bout it, an' think I'm dead an' done gone to heaven. Yum, yum!"

"Le's do it ag'in."

"Le's do . . ."

"Umph-uh-h! Hain't that jest awful good?"

"Seems jest like a dream. Wish we could keep on a-doin' that all the time."

"We kin."

"Uh, huh. Folks mought talk 'bout it."

"Not if we was married, they wouldn't."

"But we hain't married, though."

"No, but we can soon git married. Square Beeson can fix us up in no time."

"Yes, but he won't do it 'thout pay."

"Co'se he won't. But we'll pay him."

"You hain't got no money."

"That ain't nothin'. I'll fix it with him."

"How can you?"

"Dunno. I'll fix it somehow."

"Whar'd we live?"

"Down thar in that empty cabin o' pap's."

"But we hain't got nothin' to go to housekeepin' on."

"Our mams 'll give us a bed an' some dishes an' things. Won't be no trouble 'bout that. Le's go an' git married."

"When?"

"Right now."

"Reckon you can fix it with the Square?"

"Co'se. Jest be boun' to fix it somehow. Le's go right now."

"Dunno. Them smouchin's is awful good, though."

"Bet they is. Le's go."

"Don't keer."

In a little log cabin on the edge of a small clearing lived Squire Beeson. The Squire was sitting in the open door, sawing a discordant noise out of an old fiddle. His right leg was thrown over his left knee and a couple of half-grown chickens were roosting on his bare right foot.

Suddenly a couple walked hand-in-hand up the path leading to the cabin door. The Squire saw them and stopped his torture of the fiddle. As they drew near Ben called out:

"Howdy, Square?"

"Howdy, Ben; howdy?" the Squire returned.

"You right well, Square?"

"Middlin', Ben, jest middlin'. You well?"

"Tol'able. You right smart busy, Square?"

"Not overly. Reckon thar ain't nothin' in the line o' jestice you's a-standin' in need of?"

"Not edzackly in the line o' jestice, I guess, Square. Still, I mought be a-wantin' somethin' in your line o' business."

"Jest so. Wal, if thar's anything this court kin do fer you she's at yo' sarvice. So jest speak out an' say what you'uns air a-wantin'."

"I hain't done said I air a-wantin' nothin'. I said I mought be wantin' somethin'."

"Wal what air it you mought be a-wantin', Ben?"

"I dunno, Square. I sorter 'lowed mebby me an' Liz here mought teck a notion to git married. I 'lowed mebby if it wa'n't goin' to be too costly we mought."

"Edzackly. Wal, that's proper an' according to the Scriptures, Ben. The Good Book says it hain't good fer man to be alone, meanin' woman, too, I jedge. So you an' Liz figgered to git j'ined, eh?"

"We reckoned we mought."

"We hain't so dead sot on it, though, Square, that we're goin' to be willin' to pay no great big price."

"Jest so. Wal, what you'uns figgers you'uns is willin' to pay, Ben?"

"Dunno, hardly. What you 'low you can j'ine us fer?"

"Reckon you'uns hain't got no money?"

"Nary a cent, Square."

"You'uns got anything to trade?"

"Nothin' but them dawgs an' these here rabbits."

"No tobacker, nor a pig nor nothin'?"

"Nary a thing only what I done told you, an' an old fiddle an' a gun. I'll gin you two o' these rabbits fer jinin' us, Square."

"Can't do it fer that, Ben. It's wuth a heap to many folks."

"It ortn't to be wuth much. It don't teck hardly a minute, an' a feller 'll work like sixty all day fer six bits. That's gittin' them rabbits pow'ful easy, Square."

"I know, but it hain't the time ner the work that counts in a case like this, Ben. It's the awful an' solemn responsibility. I can't marry you'uns fer two rabbits."

"Wal, I reckon mebby I mought make it three."

"Guess we can't trade, Ben. It's wuth a right smart to marry a couple. Thar's so awful much responsibility to it."

"S'pose we say four rabbits, Square?"

"Won't do."

"Wal, how much you willin' to jine us fer, then?"

"Dunno, hardly. I want to be as easy on you'uns as I kin, but I don't dast be too easy. I reckon, now, I mought jine you two fer all them rabbits an' the fiddle."

"Can't give you all them, Square."

"Can't make no trade, then."

"You'uns can throw off the fiddle easy enough."

"Don't reckon I kin."

"You'uns can give us a short weddin', a-leavin' out some, an' makin' it cheaper, can't you?"

"No, can't do that. Got to git all of it in. Got to be awful partic'lar 'bout that."

"Wal, throw off the fiddle, Square, an' we'll call it a trade."

"Can't do it, Ben."

"I'll gin you all six o' these here rabbits."

"Can't do it."

"They's pow'ful big an' fat, Square. Jest heft 'em oncet."

"Can't trade that erway, Ben."

"Heap o' good eatin' in them rabbits, though."

"Can't make no trade like that. Have to throw in the fiddle."

"Gin them rabbits is fixed up nice an' brown they's goin' to be moughty scrumptious, Square."

"Fiddle or no trade, Ben."

"Pow'ful juicy an' rich, them rabbits is. Yum, yum! 'Most makes my mouth water to think 'bout 'em."

"Fiddle or no trade."

"Thar's Liz, Square. She's pow'ful anxious fer the weddin'. You ain't goin' to stan' out an' break her heart, fer the sake o' that old fiddle, air you?"

"Like to please, Liz, but I got to have the fiddle or no trade."

"Wal, I reckon we mought as well be a-goin'. If you hain't willin' to jine us fer them six rabbits we jest won't git married. Come on, Liz. Wal—er—far'well, Square."

"Give me the rabbits an' fling in one o' your dogs an' I'll marry you, Ben."

"Can't do it, Square. Six rabbits or no weddin'."

"Fling in a dog an'—"

"Good-day, Square. I guess we won't—"

"Wal, give me the rabbits an' jine hands. Can't afford to break Liz's heart like that, an', anyhow, we're kind o' short o' meat at our house jest now."

JOHN MUIR, A KING OF OUTDOORS

By ADELINE KNAPP

A KING OF OUTDOORS: I know no other phrase that so aptly designates John Muir, naturalist, explorer and writer; nor do I know any man to whom the phrase is so applicable.

He has been styled "the Californian Thoreau," and Emerson, who knew and liked him, once went so far as to call him "a more wonderful man than Thoreau." It is doubtful, however, whether Emerson himself knew exactly what he meant by that rather impossible expression. The two men are wholly different in essentials of thought, so that it would be hard to institute any real comparison between them.

For twenty-five years John Muir has made out of doors his realm. For more than half this time he lived and wandered alone over the high Sierras, through the Yosemite Valley, and among the glaciers of California and Alaska, studying, sketching, climbing. At night he sometimes rested luxuriously, wrapped in a half-blanket beside a camp fire; sometimes, when fuel was wanting, and the way too arduous to admit of carrying his piece of blanket, he hollowed for himself a snug nest in the snow. He is no longer a young man, but when last I saw him he was making plans to go again to the North, to explore the four new glaciers discovered last summer by the Harriman Expedition.

"What do you come here for?" two Alaskan Indians once asked him, when they had accompanied him as far, through perilous ways, as he could hire or coax them to go.

"To get knowledge," was his reply.

The Indians grunted; they had no words to express their opinion of this extraordinary lunatic. They turned back and left him to venture alone across the great glacier which now bears his name. So trifling a matter as their desertion could not deter him from his purpose. He built a cabin at the edge of the glacier and there settled

to work, and to live for two long years. He made daily trips over that icy region of deep gorges, rugged descents and vast moraines, taking notes and making sketches, until he had obtained the knowledge, and the understanding of knowledge, that he was after. Muir Glacier is the largest glacier discharging into the wonderful Glacier Bay on the Alaskan coast. Being the most accessible one in that region, tourists are allowed to go ashore to climb upon its sheer, icy cliffs, and watch the many icebergs that go tumbling down from it. This is a thrilling experience to the globe trotter, but to dwell there beside the glacier, to study the phenomena, encounter perils, alone and unaided, is an experience that few besides John Muir would court.



John Muir.

It is largely to the extended, patient researches of John Muir that the scientific world is indebted for a great part of its information on glacial movements. What Thoreau did for the region about Walden Pond, Mr. Muir has done for the whole Pacific slope, from the ice-bound fastnesses of Alaska to the snow-capped peaks of the South, giving us a minute and accurate record, geographical, geological and botanical.

Along the mountains of the coast to Alaska stretches a series of glaciers, thousands in number. Many of them are still active. From the summit of Mount Rainier, for instance, radiate eight glaciers, from seven to twelve miles long, forming the sources of the principal rivers of the State of Washington. On through British Columbia and into Alaska, the mountains stretch, and among their peaks and in their deep canyons, are still other glaciers. John Muir estimates that there are probably more than 5,000 glaciers, not counting the smallest ones. Muir Glacier has 200 tributaries, and, at its greatest width, spreads out about twenty-five miles.

The work of these great streams is even yet doing. They are cutting deep canyons in the mountains, preparing the soil for forests yet to exist, forming new lakes, sometimes destroying those now there; forming and extending fiords and inlets, blocking

out, grinding down, breaking away precipices, and, by age-long processes of erosion helping on the business of licking into shape the continent upon which we live. It is among these awesome forces that John Muir has spent the best years of his life. "God's glacial mills grind slowly," he has somewhere said, "but they have kept in motion long enough in California to grind sufficient soil for a glorious abundance of life."

This grinding he has watched year by year. He has spent months beside now one, now another great glacier; measuring their rates of travel, sometimes little more than one inch in a day, sometimes, in the case of what we may call lightning express glaciers, five or ten feet in twenty-four hours. He has noted the making of meadows and moraines; the extinction of a lake by an avalanche. He has traversed under ice caverns and crevasses, where, inch by inch, great boulders were journeying down through the centuries, to the plains below. For hours he has watched the antics of a squirrel on a bough. Nothing has been too mighty, too awe-inspiring to turn back his reverent feet and inquiring brain from investigation; nothing too small, among all the living things of nature, not to be worth his sympathetic observation and record. This is why the story of his life reads like a saga of old, and the records of his studies are full of fascination.

On his travels John Muir carried bread, made by himself, in a little sack attached to his belt. In one pocket he kept an alcohol lamp, in its tin cup; in another a package of tea. Melted snow furnished water to infuse this, and the outfit formed his provisions for weeks at a time.

"I never carried a gun," he once said to me, "because I wanted to gain the confidence of my fellow creatures, and to make their acquaintance.



John Muir's Cabin on the Muir Glacier.

You can't learn much about either men or wild animals, merely by killing them and making arithmetical measurements of their bodies."

"Suppose you had been killed?" I asked somewhat hastily.

ritory. Until recent years, it was declared by geologists that while traces of glacial action were everywhere visible among its higher peaks, no glaciers were to be found within the range. How superficial was the knowledge upon which this statement was



The Front Discharging Wall of the Muir Glacier With Stranded Icebergs.

He looked at me, with the one bright eye that sees so much more than the two of other people, and I realized my foolishness.

"Killed?" he repeated, with his broadest Scotch burr. "Suppose I had been. Could there be a sweeter, decenter place to die and be buried than up there on a snowy peak, or in a deep ice gorge? I might die in a dirty street in any city, and be buried in a hole in the ground."

"Going to the mountains," Mr. Muir says, "going to God's clean, healthy wilds, near or far, is going home."

The mountains and the wilds have been the home of his own choosing, through many years, and a marvelous home they are for any human creature. The Sierra Nevada is about 500 miles long, some seventy miles wide, and from about 7,000 to nearly 15,000 feet high. It is a region comparatively new, the most recent evidence of volcanic action, the cinder cone, dating less than one hundred years ago.

This "Snowy Range," which Mr. Muir loves to call instead, "The Range of Light," is the largest, and, on the whole, the most interesting chain of mountains in the United States. But until the King of Outdoors began his wonderful years of mountaineering among them, they were fairly unknown ter-

based, John Muir's explorations have since shown.

His researches have done much to familiarize us with the geography and the resources, other than mineral, of this wonderful region. To him we owe our knowledge of hidden lakes among lofty peaks; of beautiful streams making deep canyons and passes in their journey to the sea; of fair blooming meadows and magnificent forest-crowned ridges hid among bare, brown slopes, and snow-crowned peaks that, alone, impress themselves upon the observer from below. He it is, more than any other one man, who has brought to us knowledge of the floral wealth of these mountains. He has written of the natural gardens of the Yosemite, since destroyed by the hooved and wool-clad locusts of the valley herdsmen. To his eloquent pleas was due the earlier movement to protect this great natural park from commercial vandalism. It was because John Muir's writings had made Mr. R. M. Johnston familiar with the thought of Yosemite as a garden that he demanded to know, on the occasion of his first visit to the valley, what had become of all those wild flowers that Muir had romanced about. When he was told that the sheep had devoured them, and that the work of devastation still went

on, he returned East to start, through the pages of *The Century Magazine*, that wave of public protest which ended in the Government's protection of Yosemite.

John Muir is a Scotchman by birth, a Highlander. He came to this country with

tain hour every morning, it stood him upon his feet, by the simple process of elevating his bed endwise, while, at the proper time, the book that he needed for study was lifted from a shelf by a lever and laid, open, upon his table. After seeing this contrivance,

one learns without surprise that John Muir holds several patents of his own for labor-saving inventions.

The real work of his life, as we have seen, has been done among the mountains. The record of it is contained in volume upon volume of notes. He showed me a number of these note books. Little black-bound, pocket-worn things they are, filled, from cover to cover, with minute writing of exquisite neatness. On many of the pages are sketches as interesting as the notes themselves; here the curious growth of a storm-wrenched tree; there a singular rock-formation; on another page a painstaking study, leaf by leaf, of the top of a tree.

"Nature finishes up her work so beautifully," he said. "Just see the top of that great tree. Was there ever a feather more graceful or perfect? See what a delightful curve that one takes; look at this one—and at these. Every one is different, every one has its own beauty, and every one, in a forest of a million trees, with just its own particular little curve or twist to make it charming in its own way."

It was John Muir's custom, during the years of his mountain pilgrimages, to build little shelters, the merest storm nests, at snow line, to serve as bases of supplies, and from these to make trips in the higher regions of perpetual snow and ice. Several of these tiny huts are still standing, in the Yosemite, and through the mountains. One, in the valley, has been "discovered," now and again, by tourists, but owing to the inability of any one of them to relocate the hidden shelter when seeking to return to it, it has been dubbed, "The Lost Cabin," though the builder of it declares that he could even now go to it in the dark.

In these cabins the explorer was wont to settle down for a few days, or even weeks, when a great storm was raging, to write his notes and prepare for his next adventure. Here he rested in the luxury of a fir-bough bed, often to be awakened in early morning



Silver Fir Trees, the Mountaineer's Bed.

his parents in early youth, and his boyhood was spent in the middle West. He is a kind of mechanical genius as well as a scientist. It is perhaps this mechanical bent that so widely differentiates him from his Eastern prototype, Thoreau, the poet and philosopher. In all his work he is essentially objective; the observer, the recorder, the scientist and exact mathematical constructor. What of philosophy creeps into his writing is most elementary. At one time he believed that nature meant him to be an engineer and inventor; but an accident blinded one eye, and drove him into the wilds for comfort and peace—to the great gain of the rest of the world.

But he likes to remember the days when he was one of the cunningest of tinkers, as, now, he is one of the wisest of nature students. One day, in his library, he showed me a clock which he made for himself while at college. At that time he had never seen the inside of any clock, but his contrivance was a good timekeeper, besides being very cleverly designed, and carved. Moreover, it was connected with his bed and with his study table, in such fashion that, at a cer-

hours, by the rocking of his cabin and the noise of detached torrents and avalanches rushing down side canyons, making the whole valley vibrate with thunderous music.

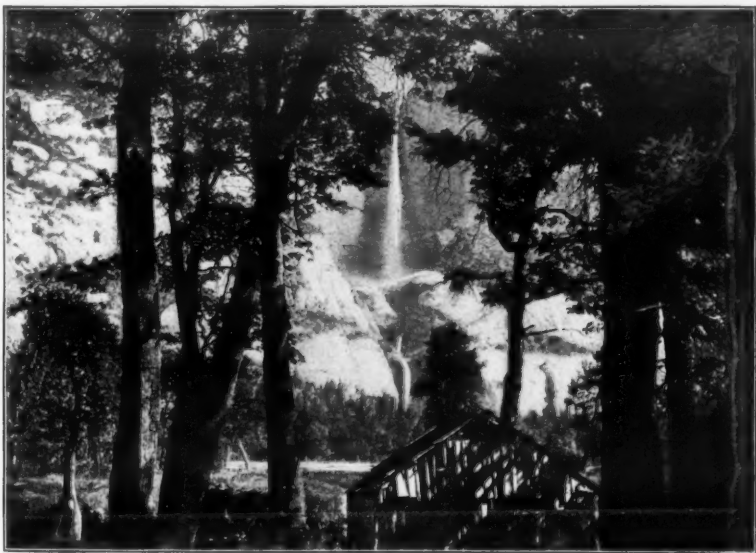
He has printed some of his most thrilling experiences; but more wonderful it is to hear him tell them. There is something primeval in his account of how he climbed Mount Ritter. In it one gets a glimpse of the very beginnings of things in man's age-long struggle to subdue the earth.

For forty-eight hours he had been climbing the mountain, tracing the channel of an avalanche in daylight, resting in the snow at night. On the morning of the third day he

relaxing, he should plunge down that terrible descent to the glacier showing white below him.

Suddenly, in the thick of that awful peril, his mind cleared, his strength seemed to be renewed, and as one returning from a look upon death, he crept up the remaining distance, to a firm foothold. The rest of the way, a maze of deep gullies and yawning caverns, "riven ravine and rocky precipice," he traversed without difficulty, to reach the topmost crag in a blaze of sunlight, conqueror at last of that sublime place.

One of the greatest services John Muir



A Yosemite Cabin.

reached an elevation of 12,200 feet, and found himself at the foot of a sheer, icy wall, some fifty feet high. He had no ice ax with him; he dared not go back; for already, in his progress, he had scaled passages which he knew he could not descend. He could only go on. Cautiously picking finger and toe holds in the smooth ice, he began the climb. For the first time in all his experience, his matchless nerve failed just as he was half way up. With outstretched arms and clinging feet, he pressed his body close to the sheer wall. Helpless and shaken, he was awaiting the inevitable instant when, the tension of his muscles

has done for his adopted state, and, incidentally, for the country at large, has been his aid in procuring legislation for the protection of the forests. The forestry problem, in California, has long been a serious one. Among all the forest reservations within the state none includes that most characteristic Californian tree, the *sequoia sempervirens*, commonly known as the redwood. This grows nowhere outside California; yet the state now owns not one acre of redwood forest. Every foot of it has been sold to private parties, and the trees are rapidly converting into lumber. But with the history of every forest reservation

in the state the name of John Muir is closely associated. He loves a tree as most of us love kindred spirits among human kind, and is even now engaged in an exhaustive work dealing with the national parks and forest reservations of this country, a subject, to handle which he is pre-eminently well qualified.

"Do you know the sugar pine?" he once asked of me. "The high priest among trees; look at this one," and he showed me a photograph of a magnificent specimen. "I wish," he added, "that the whole world could go out and listen to him. We should not need then to implore protection for our forests."

To John Muir, trees are individual and characteristic. Each one that he meets becomes an acquaintance; but for the rest of us it is as he himself says, "Few have lived long enough with the trees to gain anything like a loving conception of their grandeur and significance as manifested in the harmonies of their distribution and varying aspects."

John Muir is a fascinating companion. He abounds in fun, and his talk is apt to become a monologue, as listeners grow too interested even for comment. He runs on in a steady, sparkling stream of witty chat, charming reminiscence of famous men, of bears in the woods and red men in the mountains; of walks with Emerson in the beautiful flowered meadows of Yosemite; of tossing in a frail kayak on the storm-tossed waters of Alaskan fiords. By turns is he

scientist, mountaineer, story-teller and light-hearted schoolboy.

Alhambra Valley, where he has a home of many broad acres, is a beautiful vale curled down in the lap of the Contra Costa hills, sheltered from every wind that blows, and warmed to the heart by the genial Californian sunlight. Here he dwells, a slender, grizzled man, worn-looking, and appearing older than he is, for the hard years among the mountains have told upon him. Here he has a series of vineyards that are a delight to look upon. It was grape time when I saw

it last; acre upon acre of vines stretched out in every direction, the brilliant red of flaming Tokays, the golden green of ripe Muscats, the rich purples of Black Hamburgs and Cornichons made a fine color scheme amid the rich dark foliage, while all the air was delicious with the fragrance of the teeming harvest.



A Bit of John Muir's Ranch, in the Contra Costa Hills, California.

It was a fair picture of peace and plenty, under the soft, blue September sky. A stream ran close at hand, shaded by alders and sycamores and the sweet-scented wild willow. On the bank nearest us stood a solitary blue crane, surveying us fearlessly. A flock of quail made themselves heard in the undergrowth, and low above the vineyards a shrike flew, uttering his sharp cry. Noting him, I said to Mr. Muir:

"So you don't kill even the butcher birds?"

He looked up, following the bird's flight.

"Why, no," he said; "they are not my birds."

QUEER USES OF COMMON THINGS

BY HARVEY SUTHERLAND

ANY way you choose to look at him the human animal is interesting; but he is never more so than when he is trying to accomplish something. Not being possessed of the magic word which would enable him to get what he wants merely by wishing for it, he can never go straight ahead toward his desires, but makes headway like a sailboat in a contrary wind, tacking first to one side and then to the other. He cannot warm himself when he is cold unless he first burns up something, coal and wood or else the tissues of his own body by slapping his chest or hopping up and down. It is this having to go at everything on the bias, so to speak, that makes us say that human nature is "queer," for "queer" means "on the slant." Naturally, then, every use that man makes of the rest of nature is queer. Getting accustomed to a thing prevents us from noticing that it is ridiculous. Take the United States Senate for example. The members are so used to hearing and talking nonsense that it never occurs to them what a comical figure they cut before a sane world. But when we see some process for the first time we get the full benefit of its essential queeriness. Anybody that had been around painters would never have thought twice about it, but I remember the first time I saw a man graining a door with beer—it was a church door, too, by the way—I thought it was queer. I couldn't understand then, and I can't understand now, how people whose scruples will not allow them to eat mince pie that has brandy in it could ever reconcile it with their consciences to have grained woodwork about their houses, to say nothing of going into a church whose door had been treated to beer.

When Man and his Wife first got off at this Earth station without a return ticket, funds or baggage (they didn't even have a hand-satchel), they found two of their four limbs disengaged from the task of walking, and at the ends of each of these two limbs five prongs, all movable, one of them capable of being opposed to each of the other four. They had also something inside them restless and inquisitive, just like their cousins that hung by the tail in the trees and jabbered at them. Not living in trees and being simply obliged by that internal

restlessness and inquisitiveness to do something with the two spare limb-ends, they began to fuss with objects about them. They were not so strong as some animals; not so terribly armed as some; not so safely armored or disguised as some; not so sharp of vision, acute of hearing or so keen of scent as others. They were in a world already well-peopled by creatures that distinctly resented their coming as an intrusion entirely uncalled-for on such short acquaintance; in a world where all the labels of "Good" and "Bad" had come off—if, indeed, they had ever been stuck on; in a world, whose motto is and ever has been, "Root Hog, or Die," with the accent on the "Die," and in a world which had as little sympathy then as now for a young man trying to make his way in life. If that internal restlessness and those two pronged limbs could not be turned to account it was obviously all up with the newcomers.

From that date the Queer Uses of Common Things began. I can imagine the shocked surprise of the Birds (very good family, the Birds are; among the early settlers, old as the hills, older than some hills, distantly connected with the Reptiles, I believe), I say I can imagine the shocked surprise of the Birds when, after having flown up to a safe place in a tree, Man threw stones and knocked them off the perch.

"Why! why! What kind of doings is this?" they demanded to know. "It's no fair pegging stones. Stones belong on the ground. It is a very queer way to act, and we shall certainly complain to the janitor about it."

The other animals thought so, too, when Man learned how to put some sort of an edge on the stone and to haft it in a split stick so as to reach in and kill them in their burrows, which is plainly against the rules of the game. This unnatural lengthening of the arm entailed other queer uses of common things. The stone kept slipping out of the split stick and Man took grasses to tie it fast, and what grew out of that first knot would take a book to write. But the strings slipped off the stone and Man made use of the first glue, his own blood, which is a very good glue indeed if you use a plenty and have nothing better. Later he used the

blood of the pitch-pine, and still later he boiled hoofs and horns of animals and used their sinews for strings to lash the spear-head fast.

After having made the cut in himself to get the natural glue, the wound began to smart, for at that time our ancestor had not discovered the great truth that really he had no pain, but suffered only from the belief that he had one. The poor, ignorant creature tried everything he could lay his hands on to see if he could not make the soreness go away. No doubt he told it to get out, but the power of mind over matter was not great in those days. I suppose, too, that somebody kissed the wound and made it well or blew upon it with the same happy result, just as children's bumps stop hurting now when mamma kisses or blows on them. He chewed up leaves to make poultices. No doubt, some of these herbs killed him in a hurry; some of them made him delightfully dizzy and drunk, and he forthwith gave orders to his wife that on no account was she to enjoy herself by tasting them. It is this sentiment still persisting in us that shocks our moral sense when we see ladies using liquor or tobacco to excess. It's too good for them. Woman was put into this world to have trouble, not a good time, and it is Man's sacred duty and privilege to see that she keeps to her proper sphere.

Some of the herbs he chewed tasted good, and have ever since been on the bill of fare. Some of them did the wound good, and have ever since been on the list of the pharmacopeia. Anyhow, it was there that medicine began, and of the queer uses of common things in that branch of human activity there is no end. Man being essentially queer, of course he could not get it into his head that the plants healed by virtue of some material property in themselves, but because they were inhabited by friendly spirits. He even got the notion that if a big dose of the plant would make him have such and such a sickness, a tiny dose of it would cure that sickness, if he got it naturally. From imagining likenesses in different herbs to parts of his own body and incorporating those weeds in poultices, he arrived at the queer discovery that the salve ought to be applied to the sword instead of to the cut it made, and it simply did beat all how much quicker it healed that way. It did not hurt the sword much to have the salve on it, and it gave nature an opportunity to do her own curing, which she will do if she has half a chance unless the case is too serious,

when she adopts the philosophy of "Doc." Sifers as celebrated by James Whitcomb Riley:

"What's your idy livin' when you're just as good as dead?"

Out of some of these nonsensical practices some really good things did come, but they always took a devious path which entitles them to be called queer. If a man wanted to be noble and royal, he took gold-dust; if he wanted to be strong, he filed his sword and swallowed the fine particles. That being a disagreeable way to take iron, it was put up in liquid form, and really does make a man strong, as well as putting an edge on his teeth.

Out of the queer use of a common creature regarded as most potent in old-time medicine there came the most surprising and nearly the most important of inventions. Every school-boy knows that a toad can cause warts or make the cow give bloody milk, but not everybody knows that toads are also powerfully medicinal. It is a fact. Martin Luther says so. These are his very words: "Experience has proved the toad to be endowed with valuable qualities. If you run a stick through three toads and, after having dried them in the sun, apply them to any pestilent humor they draw out the poison and the malady will disappear." Pope Adrian always carried a bag about his neck containing dried toad, pearl, coral, gum tragacanth, smaragd and other articles of junk. It did him a power of good, he said. It was all that kept him up. And lest you think that they only did that hundreds of years ago, I want to say here that when my father was a boy and suffered from quinsy they used to tie live frogs about his throat. The frogs nearly clawed the hide off. They did not cure the quinsy, but that's a detail.

Well, knowing this potency of toads, it occurred to an alchemist one day that it would be a fine thing to take sulphur, saltpeter and dried toads, pound them all to a powder and "sublime" them together in an alembic, which he carefully luted and set on the furnace to heat. He poked up the fire and waited around, thinking what he would do with all his money if this should turn out to be the powder of reduction that would turn base metals into gold, when, bang! went the alembic and the windows blew out and the door ripped off its hinges and fell down, bam! The alchemist scuffled out from under the ruins of the furnace, shook a red-hot coal or two out of his shoe and the ashes off himself and wondered what had

struck him. He tried it again and again, and each time with the same result, and then it dawned upon him that he had discovered a fair article of blasting powder. Since then about all that has been done to his recipe has been to put in a little better article of charcoal, say that of willow twigs, instead of toasted toads.

Little did the old alchemist dream what potency was in that "powder of reduction." For such it is. Although it never yet has turned lead into gold by its mere touch, yet when a small, round piece of lead is put with the powder into an iron tube of curious workmanship and fire laid thereto it is possible to convert another man's gold into the possession of him that has the iron tube of curious workmanship, and not gold only, but all manner of goods and chattels, houses and lands, messuages, easements and hereditaments, even men's souls and bodies. Lay down the book for a moment and bethink you what this powder *par excellence*, this powder of powders, has brought about since first the dried toads charred in that alembic. How has it put down the mighty from their seat and exalted them that are of low degree! How has it been the helper of men that struggled for their country's freedom, believing that they had the right, God-given and inborn, to govern their own affairs, and not to be ruled from beyond the sea, a glorious doctrine when the time is 1776, and the sea the Atlantic, contemptible and rebellious when the time is 1901 and the sea the Pacific! This powder asks no questions as to right or wrong. It propels with equal violence the bullet against the breast of him that fights the foreign tyrant and him that resists the benevolent assimilator.

It pierces through the mountain crag that blocks the path of commerce or it rends asunder the steel doors of bank vaults where men store their wealth. Perhaps the trusted cashier has been there first. It is all one to the powder. It thunders in the welcome of the home-returning hero, he that has slain more men and burned more houses than the other fellow; it stars the heaven with ascending rockets in his honor or it sounds the dreadful minute gun at sea and shoots aloft the appealing signal from the laboring ship. By its aid a nation manifests its joy, and the next day the little boys go round with thumbs tied up in cotton rags and half their eyebrows burned away. Queer as gunpowder's uses are, there is nothing queer about it. It is mankind that is queer, and when the simple savages sow it in the ground,

expecting it to germinate and bring forth its kind, some fifty, some sixty and some a hundred fold, it simply refuses to be a party to any such tomfoolishness.

For all that modern chemistry was coming into existence all the centuries that have elapsed since the alchemist made his experiment, it seems odd that no other explosive was discovered until 1827, when Pelouze made pyroxyline. The human mind is so constituted that it will believe anything possible to a substance with as hard a name as that, but as soon as one says that common cotton can be made dreadfully explosive and still preserve its cottonness, we are all ready to exclaim: "Why, isn't that queer!" Cotton will burn rapidly, as anybody knows that ever dressed a Christmas tree and had the clever idea of trying to get a snow effect, but it will not burn eight times as fast as gunpowder unless it is treated chemically. Perhaps the story of the facetious chemist may illustrate what happens to the cotton when it is applied to the queer use of burning itself up so fast that it hasn't time to scorch the skin of the palm if it is ignited thereon.

The facetious chemist took an ordinary cotton handkerchief and soaked it in nitric and sulphuric acids. Then after so long a time he took it out and rinsed it carefully so as to remove the free acid. It looked then like any other cotton handkerchief. It went to the washerwoman, who put it through all the waters that handkerchiefs go through, hung it out on the line and took it in again when it was dry. She spread it out on the ironing-board, put the hot iron on it, and—it went away. There was a flash, a puff of smoke and then—no handkerchief, not even the ashes of one. When you consider how frightened the poor washerwoman must have been at such goings-on in the broad, open daylight, how worried she must have been lest the gentleman should think she had stolen his handkerchief—for she was an honest woman I make no doubt whatever, at least as far as cheap cotton handkerchiefs were concerned—and, of course, she thought he wouldn't believe her when she told him what had become of it, you will see at once that this is really a very fine joke indeed, and ought to have been in *Die Fliegende Blätter*.

What happened to the handkerchief was what happens in the manufacture of gun-cotton. The sulphuric acid takes the water out of the cellulose and the nitric acid makes an arrangement whereby a certain amount

of nitryl gets to take the place of it so that when fire is applied it all burns at once. Starch is the same thing chemically as cotton, same proportions of carbon, hydrogen and oxygen, only the pattern, so to speak, of the molecule is different, and out of that law-abiding box of white grains at this moment in the left-hand corner of your kitchen cupboard, madam, could be made enough nitro-starch to wreck your happy home while you were saying "Jack Robinson." The molasses jug is just as potent for destruction, and an explosive is now marketed that is made from straw, nitrated in the same way as cotton. Of course, you have heard that glycerine, which is so good for chapped hands, can be turned into the most powerful explosive known by the same combination of acids. It is so powerful that it has to be diluted with infusorial earth, each tiny particle of which, long years ago was the shell of a little animal that never dreamed it was going to assist in torpedoing an oil well. It seems to me a queer use of this terrible destructive that it should be a medicine, a heart-stimulant. If anybody is desirous of getting a headache without a gay evening to precede it he has only to taste a tiny drop of the yellow, sweetish, oily liquid and he will think every beat of his heart is a whack of a sledge hammer on the back of his neck.

It will be observed that the discovery of these wonderful nitrogen compounds is a modern instance of the restlessness of our prehistoric ancestor that made him fuss with everything he could lay his hands on. Chemists in the early half of the nineteenth century were just like Man when he arrived. A lot of strange, new elements and stuff in bottles were about, and they could not rest until they had mixed this with that and t'other to see what would happen. And just as our prehistoric ancestor learned some very painful lessons in that expensive but best of all schools, conducted by one Experience, so the chemists took a few terms of him, and about the first thing they found out concerning nitro-glycerine was that it has a hasty temper and will not put up with being joggled rudely. It is so easy to make and lends itself so readily to political plotting that some governments in Europe objected decidedly to the publication of works about it, but if they had read up a little themselves they would have found out that nitro-glycerine also insists upon being washed thoroughly. Now, if it be true, as the comic papers say, that Anarchists do

not wash themselves, it is likely that they would not wash the nitro-glycerine. The stuff in that case would sit still in silence, brooding over its injuries, and then all of a sudden, without anybody touching it or saying a word to it, would declare: "I'm going to get out of here!" and the next second in the place where the house stood there would be a hole in the ground about twenty feet deep, and all the windows for about a mile around would be tinkling to the sidewalk. What Anarchists there might be in the same room would be dissipated into fragments, none of which would be large enough to grease a saw. Even a paulful of water that has been used to wash nitro-glycerine has been known to explode while sitting in the sun. It seems to me as good a way as any of getting rid of Anarchists.

All the wonderful things of which cellulose is capable were by no means exhausted when it was made explosive by means of nitric and sulphuric acids. Gun cotton, at its best, is not soluble in anything, but when it is not so thoroughly nitrated it can be dissolved in ether-alcohol, but not in anything else. When it is poured over a glass plate it leaves a film which takes the silver salt nicely and does quite well for photography. Or, if you should knock the skin off your knuckles and pour some of this liquid, collodion is its name, on the raw spot it will not wash off, but keep the air from it until the new skin grows underneath. I once worked with a man that was most particular about his language. One day he climbed up on a chair to take something down from the top of a tall press. I think he tried to stand on the back of the chair, but I won't be sure. Anyway, when he picked himself up off the floor and pulled up his trousers leg, to see what had happened to him, there was a ragged ribbon of cuticle about an inch wide and about four inches long, or maybe it was five, ripped off his shin bone in the most shocking manner, and all he said was, "Ouch! Soo-oo-oo!" But when I poured some collodion on— Well, sir! you ought to have heard him. No. Come to think of it, I'm glad you didn't. In about a minute the men from the shop came rushing into the office to know what the matter was, but by that time the raw spot had quit smarting, and he told them to go on along about their business; it wasn't quitting time yet. And Jake Hoffman, the foreman of the paint shop, said, "Oh! he thought he heard the whistle blow." If he hadn't been the best hand on burl walnut to

be found in that part of the country he would have got his time right then and there. He was a great fellow to joke, Jake was.

But covering up wounds is no queer use for cotton, even in a liquid form, and making photographs is not so queer either, but to use cotton for combs is certainly a little on the slant, so to speak. If you take ordinary, thin blotting paper, which is the same thing as cotton or cellulose, and tear it up into little bits and soak it for twenty-five minutes in two parts of nitric and two parts of sulphuric acid at a temperature of about sixty-four degrees Fahrenheit, wash it thoroughly with water, and while it is still moist mix it thoroughly with camphor, you will get transparent lumps of stuff that may be worked with iron rollers and made into sheets, out of which you can cut combs that can be stained to look like tortoise shell. They will be celluloid. The camphor is added not to make it smell nice, but to smother its explosive tendencies. Celluloid will not blow your head off, but it is my advice to you not to go too near the gas jet with that tortoise shell comb of yours.

Cotton has often masqueraded as silk, but it seems rather queer that it can be made into real silk. The nitrated cotton is put into a cylinder with ether-alcohol and slowly revolved for twelve hours. Then, under a pressure of forty-five atmospheres it is squirted out of glass tubes whose bore is 1-1000 of an inch. The air solidifies the threads as they are carried along on moving belts. They are fine as silkworm filaments and as lustrous. They take dyes well, but they are so inflammable as to be almost explosive, obviously a fatal defect. Just here is where the modern chemist shows the kind of creature he is and what his principles are. I don't know what you think of a man that deliberately, and to compass his own selfish ends, takes advantage of the little weaknesses of the elements and introduces the tempter into peaceful chemical combinations to lead astray some members. Such men exist. They get their living by such tricks. They even hold up their heads and call themselves respectable. Here is this nitryl, living happily, so far as we know, with cellulose, and along comes the chemist and brings in a smirking, stylish Lothario of a sulphurate of calcium and away goes the giddy, deluded nitryl, leaning on his arm just like the poor lady in "East Lynne." All that the deserted artificial silk can do after that is to look pretty. It never plucks

up the courage to explode. Well, it's a queer world.

One of the uses of this modification of the cottony, pithy structure found in all vegetables is to spin it into threads and char it for the luminous loops in incandescent lamps. Also when woven into a kind of bobbinet and impregnated with the oxides of thorium and cerium it makes the mantle of the Welsbach light.

Artificial silk can also be made out of glue, thus demonstrating that our ancestors were not so foolish and ignorant as we like to think. So far as we can judge, there was no reason why they should not have made the proverb read: "You can't make a silk purse out of a cow's heel." But they didn't say that. They used another simile. They were smart enough. After taking all the trouble to make a proverb, they did not propose to have science get the laugh on them by making silk out of cow's hoofs and horns. The gelatine is dissolved in water to the proper consistency, dyed and forced through tiny glass tubes as with the cellulose silk. It is really an animal product like the silkworm silk, but the manufacturers have not yet been able to get the appliances for waterproofing the thread with the vapor of formaline that the silkworm has which secretes the same drug for the same purpose. Also, it is quite difficult to dry the thread quickly on the carrying belts, for you can easily see that they cannot be made very long. I suppose every one that reads this will instantly think it would be easy to dry the threads if the room was made very warm, but, unfortunately, warmth and moisture together have the property of making the glue softer. Another difficulty is that the silk must be dyed before it is spun, and as gelatine has a way of not being the same shade for the same quality of stickiness, it is pretty hard to tell what color you will get till it is dry. If the spun threads are soaked in the dyepot the stuff thinks that this is a new way of making wine jelly and makes all possible haste to change itself from dress goods into dessert. Still, it makes a very pretty silk if you don't wear it out in a rain storm.

Before getting too far away from cellulose, it ought to be said that pegamoid and pantasote, preparations applied to leather and other articles, making them impervious to water, acids or any other solvent, are a kind of celluloid. The gun-cotton is dissolved in acetone, acetic and ethylic ethers. It has been proposed to waterproof paper currency with pegamoid so that the bills

could be washed up nice and clean every day at the banks. But I have never heard any loud and vociferous outcry from the public against the condition of paper money. Few persons of my acquaintance are able to keep any of it long enough to catch diseases from it, and, furthermore, as my old friend Vespasian said when discussing a similar subject with the Emperor Titus, "*non olet*."

I hear that in Germany they have succeeded in obtaining a cellulose that is elastic and transparent, without the use of acids and the ethers. It has been known for some time that if white paper pulp is beaten too long it develops translucent spots. In this case the pulp is beaten some twenty-four hours, and turns into a clear, honey-like stuff, which, when dried, acts like celluloid. Maybe so. In Germany, too, they make billiard balls out of sour milk. I have not investigated this as I am not interested either in sour milk or billiards, but I believe it to be true because I read it in the newspapers.

I know that blood is worked up into buttons, and I am told that everything about the pig is turned to account in the packing houses except his last dying squeal. Of late, I have thought that this has been prepared for the market unbeknownst to me. The people in the flat below and on the other side of the hall have company often. They play the piano, and if they don't open a couple of cans of Essence of Squeal, then I'm no judge.

Fine sugar used to be clarified with blood, but they have given that up. Alum has the call now. It is thought to be a little less melodramatic and sensational. When I was a boy, my grandmother had the most beautiful ornament on her parlor center-table that ever human eye beheld. It was a basket made of corn husks and covered with crystallized alum. It looked pretty, but it didn't taste good. I know, because I licked it. And that wasn't the only licking done that day, either. And then she had a what-not made of spools—but there, I mustn't go bragging about the nice things my relatives had. I understand it is not good form. Still, it seems a queer use for both alum and spools. I suppose you knew that alum was an ore of aluminum. Did you know that it was used to purify the drinking water in reservoirs instead of filtering it? The alum coagulates the albuminous stuff that has no

business there, and as it rises to the surface it regularly brooms the water clean of all foreign matters that can be mechanically separated.

Naturally, the next thing to consider should be indigo, because speaking of "water" and "clean" makes you think of washing and Monday morning and the blue-bag. Also, it makes you think of the Boers by indirection, for those defenders of their institutions make one wet rag in the morning do duty for the faces and hands of pap and mother and the eleven children; and then, too, the British fired shells of lyddite at them, and the fumes of the explosion turned them a gaudy yellow in complexion. Now, lyddite is indigo on which nitric acid has been poured. It is not only a thing to be melted and loaded into shells and set off with a primer of guncotton, but it is a brilliant yellow dye. When the explosive is made in England it is called lyddite; when it is made in France it is called melinite, but it will answer to either name if it is touched off in the right way.

This may seem a queer use of indigo, but it is still queerer that all the bright colors that we call the aniline dyes, and which we know are derived from the coal tar products, are so named from indigo's other name, "anil," made in the laboratory. So many and so wonderful are the uses to which chemists have put the common, black, ill-smelling tar, that by-product which the early manufacturers of illuminating gas tried so piteously to get carted away, that one hardly dares to speak of them as "queer." They are too great. They are amazing. They are even awe-inspiring, for to see whither experimentation with the carbon compounds has brought us is to realize that there we are very near to the spot where the profoundest secrets of the living, growing world lie hid. Some of the triumphs of the chemist in his domain come so near to mortal man's having a hand in creation itself that it almost scares. When a human being can make from tar an indigo so good and so cheap that within the last four years it has risen to be the successful rival of the indigo that the Good Lord causes to grow in plants, we may well pause and look back upon the long and tortuous way we have come since first our ancestors began to make Queer Uses of Common Things.

BACKLES, WAR SCRIBE

By WILL LEVINGTON COMFORT

Author of "Trooper Tales."

THE *Sungkiang* was tumbling through a black night on the China Sea, which is the heart of the greater ocean. The heart of the Atlantic is that ugly, tumbling stretch of sea-water off the coast of Hatteras, but it does not throb so wildly or so incessantly as the plunging monster which the little *Sungkiang* was riding that starless night. If you should take the densest dark from the Hatteras coast and lay it down upon the China Sea at night, it would show up gray in contrast.

"It's so bleary that it gives one the shivers," was the way Backles described the night. Then he curled up tighter in his steamer chair, clinging so firmly to the cane sides that they squeaked plaintively. In fact, the whole boat was squeaking, and now and then gusts of foamy wind would roar past. One of these gusts had caused Backles to remark:

"It sounds as if the whole sea was burning in a furnace, and the door had just swung open."

Let it be known to all the world that Backles was pure gold—every fiber of him. If I knew anything finer than pure gold, I would say that Backles was it. Six cruel months of Luzon service had caused my idea of Backles to take its present form. Now, neither the world, the flesh nor the devil could alter this idea. When men in the field, myself included, had been changed into beasts by heat, hunger and the hyke, Backles was the same quiet, smiling marvel. . . . I would give years to smoke an hour with Backles to-night. Instead, I will tell his story.

He came to Luzon with the second batch of war scribes. In his modest way, he told us that he was a syndicate writer; and when the other fellows remarked upon the fine texture of his credentials, he would blush like a girl and say:

"Oh, I'm only a kid yet. Want to do some decent work sometime. What those people say about me is a lot of putty. They filled in the holes with it."

The youngster really wasn't noticed until he had been in the Archipelago ten weeks. At the end of that time his stuff began to turn up, and the rest of the press gang read it, wondered and straightway took a fresh interest in Backles. What his credentials had said was amazingly true, but the half had never been told. This young syndicate writer knew soldiers, firing lines and military formations. Moreover, he wrote about them in a way that we would have given our eyes to write. He would tell about a pack train in the moonlight, scraping along one of the rocky trails of the lower Luzon provinces; and you could hear the straining of the packs, the panting of the mules, the cursing of the packers and the tinkle of the bell mare in the lead. Backles could make you see a skirmish line of troops breast high in a river—the smoke of the live trenches on the bank in front, the fear, agony, madness and exhilaration on soldiers' faces. The din of guns, the croon of bullets, the commands of officers, the final charge—all were depicted in a manner which colored the harshness of war with a fascinating beauty.

Late one afternoon, when we were following a column of infantry in the southern country, the breeding place and hotbed of the rebellion, I awoke looking into the face of Backles. When eternity is tottering with age, I will still owe the little fellow a debt for what he did that day. The sun had made a child of me in the morning. At midday my stomach was tumbling and full of nausea, after that I only remember that I took a violent dislike to my companion, and that I swore at him. When I woke I was better. Backles was leaning over me. The troops were two hours away, and we were alone on a rebel-haunted trail. I had fallen from my horse with an attack of sun-madness, and Backles had stuck by me.

"Get up, old man," said he, helping me. "The troops are six miles off, and the niggers are all about."

We ran our horses through a little barrio, and regained the column under fire. It never seemed to occur to Backles that he had

done a thing, which others would not feel called upon to do for a fellow-hyker.

One tropical night we sat together on the balcony of the press headquarters. The Pasig swirled past below, all a-glitter with star beams. Distant rice fields sent us a warm, heavy odor of the earth, and roses were somewhere near. Those thoughts were in our heads, which come to lonely souls in exile. . . . I had often smiled at the peculiar way Backles had of expressing things—a sort of baby talk, which appealed with a deep humor, so out of place was it in a field with armed troops. This night we were very close, through the magic of the stars and the silence and the sweet, torrid air. I asked him what made him say things that way.

"It's the way the kid and its mother talk together. Guess I read her letters over so many times, that I get full of it," he said, apologetically.

"I didn't know you were married," said I.

He opened his watch case, and vaguely in the starlight I saw a picture of the mother and the child, which made up the world of this war-scribe in a far-off land. Then, in return, I showed him a picture which my watch

held. And we each felt stronger for the sympathy of the other, and we knew that the friendship, so strong and good before, was clinched now.

"I suppose," said Backles after a long time, "that you fellows think I am careful about my price. I am drawing these days. People are foolish enough to like my stuff, and the funny thing about it is that they pay for it. This is a new experience for me, but the thought comes that something might—happen! Then what would she and the kid do? So I just send her all I don't actually need."

Backles was breathing hard in the embarrassment of the moment. I placed my fingers

over on his knee near his hand, and mine were caught in a tight grip. We were both smoking furiously.

Now the events of the China service had called us to follow. Judging by the way the sea and the *Sungkiang* were carrying on, it did not seem particularly probable that we would reach the Chinese harbor, but to be honest, we would have been far more anxious for the steamer to make her port safely, if that port had been 'Frisco, instead of a new seat of war. Backles was wrapped in a steamer



"He would tell about a pack train in the moonlight, scraping along one of the rocky trails of the lower Luzon provinces."

rug. I could not see his face, but volumes of smoke whirled out of the opening. I will never forget that night hour on the pitching *Sungkiang*—the creaking of the ship, the wails and shrieks of the gale, and without the black tragedy of the sea.

"I wouldn't tell anybody but you," said Buckles, "but I'm bothered with cold feet about this new deal.

I told the girl that I would be home in eight months. I have been away seven now, and we are just starting on a bigger campaign than ever. She will write me that she is so happy in the honor of my being sent to China and all that, but I know just as well as if I could see her that she is weepy about it. I'm foreboding!"

The *Sungkiang* was unkind, inasmuch as we were landed safe and healthy upon the shores of an unclean land. In truth, it was an unclean land, but the one spot on the earth's surface at that time to school a young war scribe.

The soldiers of the world were about us in the port of Taku: the dense-browed, black-bearded and altogether dirty Russian, whom we considered a terrible host; the grinning, chattering little chap, whom we deemed an inconsequent atom; the swearing, grog-hunting Mister Atkins; the stolid German band; the under-sized, irascible French dough-boy, who is a sword point, a stampede and a miniature cyclone in one, and "the rattlin', battlin' Colt or Gatlin'" regular army man, who cursed the hot heavens above Cuban hills, who hyked through the mud of Luzon rice swamps, who was shot at on the mountain trails, who breathed forth momentarily dark, strange flat-footed oaths, and who demanded now in a loud voice, that somebody "bring on them dam Chinamen."

"Square miles of giants," said Buckles, "and they all have hungry guns—poor John Chinaman—the best and softest thing to kick at in all the wide world. See there!"

Buckles pointed out toward the filthy current of the Pei-ho, sliding noiselessly past to stain the deep sea outside of the harbor. I saw the bare back of a dead Chino, bobbing

up and down in the stream. That body was being carried away, where the gods of the Celestials dwell not. Poor John would have died happy, if he might have been buried in the bosom of his sacred hills, but he was being borne out for the devil and the deep sea to seize him for their own. The soldiers on the river's edge heaved clods at the ugly, passing thing.



"Vaguely in the starlight I saw a picture of the mother and child."

Before very long, Buckles and I were in the saddle, at the head of the American column—and though we would have denied it—our eyes were straining for treachery in every moving thing. There was something in the still, fierce heat of the afternoon

which made morbid the minds of men. The Americans had served many months in heat worse than this, and yet they chafed, panted and swore. This was alien heat, an alien plain, an alien sky! The world was bringing war against a foe which was legion, though unseen. The night came and the soldiers made bloodless by the pressure of torrid heat shrank affrighted with its chilly touch. This was not the clear, crisp cold of the north. It was alien.

One morning long after we had wearied of Tientsin, and had learned the strain of waiting days, a force of the allies formed quietly and pulled out for the troubled capital beyond. Daily vague reports had reached us of horrid happenings in the north. The for-

eigners now advancing did not respect the character of the foe, but they held a deathly dread of its numbers. For miles about the advancing column not a living thing was seen—a reality which suggested the ominous to my mind.

"The Chinks are curled up somewhere ahead," said Backles. "Pretty soon we will step on a tail or a foot, and then somebody will get bit."

I was conscious of only one wish—that the force with which we were marching, might be reinforced ten times. It was a weak man's desire, but it was mine, and to palliate the shame of it, I can only say that no such thought had ever filled my mind before. And this was not the first, by many times, that I had ridden toward a hostile formation.

We shivered under the same blanket that night—Backles and I—for the night-wind had an icy clutch. I told him of the horrid realization which had grown upon me—that I was a coward—and I trembled lest he should not angrily deny my words.

"Poor old fellow," said Backles, softly, placing his hand upon my forehead. "You've got a fever, and you are sick of this continually fighting-one's-way-into-hell business same as I am. Remember that night when we told stories and played cards way up in Indang, when the niggers outside the town were shooting at our candle? You didn't have a fever then."

Backles knew what I needed—a little gentle smoothing the right way, which never yet hurt a good horse or a strong man.

The unconsciousness which possessed me that night was half a swoon, half a sleep, but I think I held very tightly to Backles—at least, I awoke clinging to him—awoke suddenly with a cry. There was a whirling shriek in the air above our heads, a stunning report from behind, then a smell of powder, and a muffled roar of men's voices—muffled because our ears had been numbed by the explosion.

"That's a pretty effective way of waking a man up," remarked Backles.

"It would have put us both into a deep sleep if it had stopped here," I said, in a shaky voice.

Backles grabbed his saddle and blanket and ran toward his horse.

"Where are you going?" I asked, feeling stronger now that the day was breaking.

"Back to see what that noisy devil lit on," replied Backles. "There was no small chance about that one, and I think it hit

the column somewhere near the pit of the stomach."

A few minutes later we were both riding to the rear to see what the shell had done. A man's interior is not at its best before breakfast, and I was sorry that I had not stayed forward. It had hit in a compact Russian camp, and made a deep, ugly gash in men and horses. The big fellows who were not struck, mumbled incoherently, and under the hair of their faces the skin showed very white. A shrill murmur arose from the Jap formation nearby, but it was not a murmur of sympathy, for the Mikado's soldiers are not fond of the big men of the continent. Again, the distant whir of mighty wings filled the air, and Backles spurred his horse forward toward it, yelling to me to follow. This act showed the brain of the youngster. Allowing that the enemy understood they had made a success of that first shot, he charged forward, knowing that they would send another in the same range. He was right. The second shell struck near the same spot, but we were not so far forward this time, and my horse was thrown to his knees by the shock, while I slapped down upon the turf, six feet in front.

The dawn was bright now, and there was panic in the Russian ranks. Unhurt men ran, the wounded crawled from that dread place, but many, many were the torn, unsightly things which moved not at all.

"Those Chinos shoot like white men, and they've got our range," said Backles, bringing up my horse, which he had captured after a race. I had forgotten the fever now, forgotten the outer world, and realized only that we were in for action. We rode forward to the American section of the column, and found our countrymen very busy getting breakfast—the wisest thing in the world they could do in a pause. As we passed by a voice drawled:

"Did I hear you say that them Chinos couldn't shoot?"

"That fellow's had his coffee or he wouldn't be humorous," observed Backles, and there were soldier experience and truth in his words. We rode on to the point, and we found that the little Japs, who made up this extreme advance, had broad grins for a stranger and were not even dreaming of panic. In front and on the right and left, at a distance of a thousand yards, the Pei-ho curved about us. The banks of the river at this point were elevated, and we knew that the enemy had builded their works behind

these banks. Our position could not possibly be worse.

"Why have they ceased firing, Backles?" I asked, though I had an idea.

"To wait until our force gets into better range and to give you and me a chance to cook coffee."

An hour passed before all was in readiness for the advance. Had the officers called "Forward" forty minutes sooner, as soon, in fact, as the men had gulped down a little hot coffee, the allied force would have contained much finer, tougher fiber. In the

"I say, Backles," called an American infantry major, who could not have been thinking wholly of self, for he pointed ahead to the Japs, "it seems for fellows who are leading the way directly into hell, that those little Jap rascals act in a very clean, capable manner."

"The same idea has been ringing in my ears, Major," said Backles. "I'm all turned around about those Japs."

"And it isn't because they don't know what is behind the banks," returned the Major. "They savvy the Chinks better than



"I say, Backles," called an American infantry major . . . "it seems for fellows who are leading the way directly into hell, that those little Jap rascals act in a very clean, capable manner."

delay, however, every soldier in the line had seized an opportunity to look at those two great gashes in the ground, and the dark red stains which lined them. Each soldier had gazed long and hard, and the thoughts which had come did not serve to make him regardless of self. You can lash a coward to the front under fire, with a riding whip, but it drags upon the nerves of a brave man to contemplate the spectacle of unburied flesh. And so it was that the allies did not advance eagerly and with abandon. The stillness was nerve-rendering.

we do. They have been up against this sort of thing before, and they're the eyes and fingers of the expedition."

Eight hundred yards ahead now was the river. Every man in the allied command knew that gaping guns, big and little, were turned his way. Still that unearthly silence continued. A sharp, loud voice raised without warning would have caused a hundred men to duck their heads. Six hundred yards now—men breathed harshly, the huddled column advanced low and slowly like a great, crawling monster, broken in many places

and nearly dead—four hundred yards, dry throats, staring eyes, throbbing hearts, and the moan of a prone soldier fainting from the mental strain—two hundred yards, a crash like that of two colliding worlds, and in the blue smoke, the intense agony of silence and nothing gave way to the savage madness of battle.

There were terrible rents in that crawling monster of a moment before, and each instant the rents grew and lengthened as a spark eats its way across a fabric; but the horrid strain of death-waiting had snapped. The column expanded like a fan, broadened the range, and its unmarred fragments breathed again in a perfect hurricane of missiles, pulling themselves together with a shout. They felt the guns in their hands now. They knew that the awful fire from the river banks could not last, because guns have to be reloaded. If only something would show itself upon the banks—something that would furnish a mark! In truth, there was but one way—to charge the position of the enemy. The little Japs had possessed no other idea, since the first shell screeched that dawn. They were carrying out that idea now.

"Glory, glory," yelled Backles. "Look at those line-bucking Japs!"

We were both unhorsed and lying low with the American contingent until the volleys were over. The Japanese point did not wait. It was hurling itself against the very base of the river's curve, climbing over its own fallen—beating, beating its mass against the hot guns of the Celestials. Twice those terrible little fatalists of Japan were driven back. Twice they plunged forward over their dead.

"In the name of God," cried Backles, "why don't we reinforce them?"

The American leader had already given the command to back up the point. Backles and I were entangled and driven forward by tons of dare-devil American manhood. Fear was the last element regarded now. The hostile force had been placed. It was tangible. And the little Jap dough-boys, despised before, had set a glorious example. Russians were charging on the left, the British and Dutch on the right, and each individual was learning what an ugly lie and libel was the statement that the Chinos had no fight in them.

The resistance on the top of the banks was the resistance of men who are crazed by an idea and feel not pain or fear. The front rank of the Americans had reached

the top and were fighting side by side with the Japs, making friends for life, and proud of it. A hundred feet from the summit a slug labeled for me delivered its message. I tried not to lie down, but my right side was insensible, and I could not use my feet. In a sort of twilight, I groped forward. The whir of bullets filled my ears, but I did not fear them. I could not see well. I felt a body under me, and paused by it, fingering it with my left hand. After a moment I saw the bloodless face of a little Jap. He was grinning feebly up to me. I was so sick, so tired that I laid my head upon the little Jap's shoulder and closed my eyes. I could not understand quite. I wanted Backles. I mumbled his name, and wondered why he did not come to me.

"I'm right here, old fellow," spoke the voice I wanted to hear. I opened my eyes and tried to think what I wanted to say to him. Backles saw my effort, and soothed me with:

"There, there—will be all better in a little minute—don't talk." He found my wound and was fumbling in his haversack for a "First Aid" bandage.

The bullets were noisy above. Very slowly I realized it.

"Pretty soon the Chinos will all be driven into the river," said Backles, "and you will be strong enough to send back a story of the fight."

"Where is the hole?" I asked at last. My thoughts were coming back. I tried to pull Backles' head closer to the ground, for the bullets snapped by viciously near.

He placed a finger softly upon a numb place, near my shoulder. Selfish, childish brute that I was to cause all this bother over a harmless shoulder wound! The little Jap beneath me was struggling for breath, and I had made him bear the weight of my head. The pain which smote me that moment was greater than any wound ever caused a soldier. Backles was giving water to the little Jap with one hand and unwinding a linen roll with the other.

"Oh, Backles, please get closer to the ground!" I whimpered. The bullets were striking the turf about us, and zipping by above.

He smiled in his quiet way and bound my wound. There were awful sounds now in the throat of the little Jap. The firing seemed never to diminish. I struggled in Backles' arms, weakly trying to bring him closer to the ground. A bullet tore through his hat.

"For God's sake, Backles," I begged,

"let my scratch go, and lie down!" I was crying like a child.

"There, there—just a minute, old chap," he said, smiling. "They've got the Chinos in the drink now. The poor little Jap is gone, but you're finer——"

His head was upon my breast now, and I heard him say something about a "letter to

the girl" and about the story of the fight he couldn't write.

And now the simple story of Backles the gentle, the brave, is finished. You who read will sigh for him, and forget. But the story of Backles is part of my life—a living memory, sad as only life can be, but beautiful still, and pure as the stars.

"His head was upon my breast now."



THE LOST GARDEN

By CHARLOTTE BECKER

Somewhere in the distant southland,
Blooms a garden—lost to me—
Warm with poppies burning fragrant,
Drowsy fires I may not see.

Subtle shadows flit and beckon
Down dim pathways bound with yew,
Where a white wraith wanders lonely
'Twixt the darkness and the dew.

In the ruined walls that echoed
Once to happy-hearted moods,
Now the stealthy, lightfoot lizards
Unmolested rear their broods.

And beneath the oleanders,
No clear voice sings, as of old,
But the fleet caressing sunbeams
Whisper secrets to their mould.

Though I follow as the southwind
Fares his way through wood and plain,
Though I question hill and valley,
I shall never find again

My lost garden—where lie buried
Joys that swift the glad hours sped;
Only one could bid me enter;
Only Love—and Love is dead!



Hawkesbury Railway Bridge, 2,900 Feet in Length.

On the North Coast Railway, running from Sydney to Newcastle, N. S. W.

A GLANCE AT AUSTRALIA

By G. SHERIDAN DOWELL

WHEN Australia grew tired of guarding convicts and chasing kangaroos, she had fun with the world for a while in gold mines.

That was half a century ago.

When fun with gold mines became tiresome, the people amused themselves driving sheep and sowing grain.

That was a third of a century ago.

When gold mines and sheep and grain had made many rich, cities were built where prisons had been, where deserts had ceased to be, and at the edge of the sea where prison ships had anchored.

That was a quarter of a century ago.

When the cities grew big and the territory behind them was resolved into self-governing provinces, all wealthy, industrious and active, jealousies, strife and unpleasant rivalry began.

That was until within the past two years.

When jealousies, strife and rivalry became not only a nuisance but a peril, the people of the Island Continent realized that power lies in unity, and formed themselves into a federation that promises to place the united colonies among the national forces of the world.

Such is the Australia of to-day.

Provinces with a history as dramatic as that of the western portion of the United

States have been united in a cohesive organization, not to separate from the home land and their King, but to stand beside the old government, equal in all things, a part of the United Kingdom.

A bleak, barren and forbidding line of sea-washed bluffs greeted the original explorers. A continuous hurricane of "Melbourne southerly busters" drove away would-be settlers of other nationalities for many years, before the unconquerable pluck of the sons of England secured a foothold on the shore. Repute said that there was nothing inviting about the place; and the good luck and the foresight of Captain Cook were required to prove that it was serviceable even as a penal settlement.

For nearly sixty-five years the country was considered suitable for little more than the stowing of criminals. Then behind the cliffs, and across the arid plains, gold was found. The past was instantly forgotten. Thenceforth, not only Great Britain but the whole world loved Australia. She became a petted bride of prosperity.

There was plenty of hardihood in the first settlement of Australia. From the early explorers—Cunningham, Stuart, Burke, Wells, Bass, McDonald, Warburton, Gregory—a legacy of boldness, courage and intrepidity

fell to the people of the continent. Men bent upon penetrating a huge, half-discovered continent, alive with hostile natives—many tribes of whom were known to be cannibals—a land scarce of water, and, in the great plains of the interior, of such scorching, shadeless heat that those who lived to tell the tale said they frequently had to bury themselves in the ground to endure it—were men to fix a character in the foundation of a nation.

Conceive a land where the blighting hot winds blow clouds of sharp sand on the bleeding skins of the men who attempt to cross it; a land where the constant metallic glare blinds the eyes even of such doughty explorers as the famous Stuart, a land full of venomous snakes and other reptiles; a land intersected by enormous mountain gorges; a land of untold privations and sufferings, and you have the lot of the courageous men who were the forerunners of the great civilization of Australia of to-day.

Turn to the picture of things as they are now. The land which these men opened, in size is nearly five-sixths the area of the United States, containing 2,973,000 square miles against the 3,602,000 square miles of our country. But while in extent Australia stands as 29 is to 36, in population she is only as 4 to 76. Of her 4,000,000 inhabitants, only 200,000 are Aborigines, whose number has been steadily declining, not because of hostility on the part of the settlers, but as if by inherent degeneracy in the face



Australia Bushman With Boomerang and Dead Kangaroo at His Feet.

of the new conditions. Moreover, there are 4,000 Chinamen and half-caste Chinese; and in recent years restrictive measures have been adopted to prevent the ingress of Hindoos and other Asiatic immigrants. The bulk of her people, of course, are colonists from England.

Two-thirds of the Australian continent is a desert, and yet her productiveness is enormous. This land contains over one hundred million sheep, between thirty and thirty-five million head of cattle and horses. It has given to the commerce of the world over £400,000,000 in gold, copper, coal and tin. The two provinces of Ballarat and Bondigo alone have produced £100,000,000 of gold, and as much more has come from the great Tambaroora and Laming Flat in New South Wales. It sends to England annually over £40,000,000 worth of metals, grains, wool, beef, tallow, hides and mutton.

Consider the sheep



Town Hall, Sydney, N. S. W.

A notable public building in the metropolis which contains the finest organ in Australia.

alone: Forty years ago the output of wool amounted to 8,000,000 pounds. Now, with a record of 700,000,000 pounds, Australia furnishes one-fourth of the world's wool and of such a quality as to make it one-third of the total value. It is recorded that the early colonists used to kill their sheep simply for the fleece and tallow, leaving the meat for the dogs. Later they began to export canned mutton to the home country; but when cold storage was introduced, Australia began her shipments of frozen mutton which have grown amazingly, until in 1900 these exports amounted to 225,000,000 pounds. Meanwhile her shipments of tinned meats steadily advanced, reaching last year 45,000,000 pounds.

Look for a moment over her mineral wealth for a year: Because of the war in the Trans-

20,000,000 tons. Her first railway—that from Sydney to Parramatta—was opened in 1855. It was only fourteen miles in length. To-day she owns 15,000 miles of railways. A curious light on her prosperity is the



An Aboriginal Grandee.

vaal and an immense mining development in West Australia, the new Federation in 1899, with \$60,000,000 output, led the world in product of gold. By constant gains, her silver product has come to equal one-ninth of the world's supply. For the past year her total mineral output amounted to nearly \$100,000,000 or \$25 to every inhabitant. Her mineral possibilities in copper, tin, lead, antimony, iron, quicksilver and coal cannot be overestimated.

As a result of her astonishing fertility, Australian shipping has reached the total of



An Aboriginal Woman.

fact that she has a million items in her daily mail, in proportion to her population the highest average in the world.

What is more remarkable is that this colossal national wealth has been built up by only four million people. As a consequence, average individual wealth in Australia is the highest in the world. For instance, let us compare the child with the parent—Australia with England. Australia's revenue for this year will probably exceed \$150,000,000, which sum is nearly one-third that of England's. But with only one-tenth of England's population, Australia is, therefore, individually three and a third times richer than the mother country. Then there are the savings banks, with \$700,000,000 in deposit. This gives \$150 per head to the people of Australia, again the highest average in the world.

The story of this prosperity is one of huge personal endeavor, of splendid perseverance, of great fertility of resource, of fine pluck and of spirited co-operation.

Differing from that of America, where a dozen or more races have been amalgamated, the story of Australia is almost entirely a

story of one race. There was not a black man on the islands when the Britons landed. There are black men there now. But they have not found the gold mines, nor sold the wool, nor kegged the tallow. They have done some commercial and mercantile service, like the Kaffir of Africa. But they have not been the factors. It has been the Briton alone that has taken the varied land through its varied history. It has been the Briton alone that has redeemed a country as big as the United States and placed it where, if it were not so devoted to its mother land, it might become an independent and powerful nation. In England, two great social principles are Descent and Money. These survive in the transplanted England which lies in the South Pacific seas.

But Descent is cherished in the new Federation not only in the family names of protracted history and dignity which come from across the oceans, but also in the lineage from the men who explored and pioneered the country. To be an offspring of the gens Cunningham or Stuart is to be of Australian royalty.

But countries whose wide acres have never been tilled, whose great forests have never been hewn, are ill company for custom and prejudice. In such lands pride of achievement—pride of making crops grow and of feeding herds of cattle and sheep, twisting wealth from the adversities of crude conditions—usually supersedes the pride of birth. But in Australasia this has been only partly the case. There has been a compromise between honor to the man who wins and honor to him who has the winnings of ancestors behind him.

The Briton is known the world over as exclusive, reserved, proud, conservative, conventional and dogmatic. He is also brave, patriotic, truthful, constant and clean. At least, he is of this mold if one give him a fair estimate at his best and his worst. His exclusiveness he gets from living on that little island of his, where, if he wants to walk off at all, it must be into the sea; where, not as on the Continent, one step takes an inhabitant from France to Spain, from Italy to Bulgaria—into other lands, among other people and other languages.

British patriotism comes from a proud certainty of the nation's standing. Constancy, steadfast nature breeds conservatism, faith in and love for all the old and cherished customs. The conventionality is, in large measure, the result of circumscribed surroundings. To get away and be able



Buildings in Melbourne, Victoria.

1. Bank of Australasia.
2. Government Offices and Treasury Gardens.
3. General Post Office.
4. The Exhibition Building.

to be by himself at all, the Briton long since discovered that he must repel by formality. Therefore he established customs to hedge himself in, which became traditions, and, in their turn, sacred, unwritten laws. This



Cabbage Trees.

A type of the Illawarra District, known as the Garden of the Colonies.

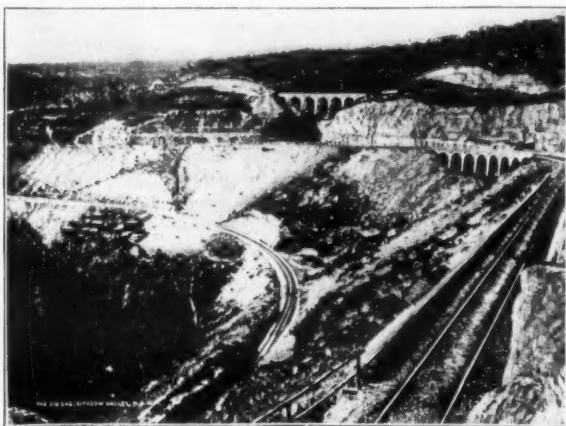
tenacious adherence to small things has narrowed him. In his heart he must know, though he will not acknowledge it, that his mountains are only mole hills. If he does not choose to see this himself, he feels, in an indistinct, vague way, that others do. Hence, the necessity for assertion and self-defense, which makes him dogmatic, and often touchy.

With this insistent inheritance at his back, it has been difficult for the Australian to change. Though he has lived from two to three generations in the wild freedom of a new continent, he still remains innately an aristocrat. His faith abides by the old, moth-devoured traditions. He has been fed from babyhood on the glory and power of his mother land. The pride of being a son of the great empire refuses to be washed

down, or to be dried up, or to be blown away by the southerly busters. He swears by the old land and is proud of the home government, thinking it extremely bad form—almost treason—to depreciate its rulers.

Strong from the outdoor life they lead and from contention with the difficult conditions that have confronted them, the Australians as a people have become tall and straight like their gum trees, broad-shouldered, deep-chested and wiry. They are clear of eyes and skin, of remarkable soundness and whiteness in their teeth, of luxuriant, fine-textured hair. Bertillon says: "When you see these characteristics generally marked you may know you are in the presence of a great people."

Magnificent distances stand before them wherever they travel within their own country, and the long travel develops endurance and calm power against adversities, as well as the gift to laugh at the smaller difficulties and embarrassments of every-day life. The £40,000,000 worth of products which the country exports annually to England comes chiefly from the vast interior, and there hundreds and hundreds of men dwell in stations separated by days of journeying. There, in lonely isolation among millions of gum trees, they tend flocks of sheep numbering upwards to 200,000 per flock. There among the far-stretching hills and mountains they round up ranges bearing 15,000 to 30,000 head of cattle. And the life that these men lead leaves its impress upon the nation.



The Zig-zag, Lithgow Valley, N. S. W.

This is one of the greatest engineering feats in Australia. A drop of over 600 feet is made within five miles.

Men who dwell in the interior of Australia are ever in the presence of valleys, plains and gorges stretching in all directions, with mountains pushing upon mountains till, in the hazy distance, they are lost in the skyline—no man's land, desolate, untenanted; theirs if they want it, only most of them

ment forced away inherited exclusiveness and the Australian became a different man from the Briton—broader, franker and more unselfish. He has outgrown repression and the sense of superiority. He has had enough experience to give him a wholesome sense of humor. He has worked hard enough to



Snowdrift, Mt. Kosciusko, 7,308 Feet High.
The Snowy Mountain Range in New South Wales.

already have more than they know what to do with. The immensity, the colossal expansion presided over by an almost awe-inspiring stillness, become either maddening or sublime, according to the temperament. Curiously enough, it is usually the sublimity that prevails.

appreciate relaxation. He has borne into the new land the liking of his home country for sport, but he has followed it on a broader scale. He has his horse races, as in England; but he has his kangaroo hunts which make the hare hunting of England seem like schoolboys' play.



Semi-Tropical Garden in the Interior.

Another effect, and one which plays equally strong in shaping the qualities of the nation, has arisen from contact with the wilderness. The Australians that lived in great solitudes could not afford to be exclusive. They felt out for a hand. Their hospitality was eager. The bush was open house. Thus his environ-

Life to the Australian is as his continent. There have been times when both life and the continent were hard to hold, but the probation period is passed. Australia for Australians has become an unchanging impulse of all the people. The inhabitants have come to realize that the power to grow, to

spread their influence beyond the country's borders—in other words, to assume nationality—is now theirs.

Aspirations above mere money-making have been generated. Australians feel the desire to rub against the people of other countries, and to test the gifts and acquirements of their long struggle in the redemption of the continent. In other words, political ambition has arisen. The federation is the means chosen to realize that ambition.

The people of Australia love the home government and presumably never will separate from it; but they have become sufficiently important to possess the autonomy and the practical participation in governing which belong to a state that is an integral

civil pageants and general rejoicing whose like had never before been witnessed in the antipodes. Although the weather was unfavorable, the streets were alive with people from an early hour. The ceremony of swearing in the Governor-General began with a procession of ministers, officials, judges, clergy, members of the House of Commons, trades unions, fraternal, social and civil societies, allegorical cars, colonial, Indian and imperial troops and blue jackets, which marched between lines of soldiers to the Government House amid cheers and huzzas. Here Lord Hopetoun in the state carriage took a place in the rear of the procession which proceeded to the park. A pavilion had been erected on which the Governor-



The Jenolan Caves. One of the Greatest Natural Wonders of Australia.

The subterranean caverns are very extensive, and the stalactite and stalagmite formations are of wonderful beauty.

part of any central government. Prior to the federation, their governors were appointed in Downing Street. Their legislators had no personal voice in Parliament. They themselves had no equality or intercourse with the great political centers of the world. All these developing responsibilities were cut off from them—responsibilities which, above all other things, are needed to awaken into action the highest intellect and the strongest judgment of a people. The Australians aspired to become a factor in the decision of world problems.

On the first day of the new century at Sydney, New South Wales, the Earl of Hopetoun was sworn in as first Governor-General of the Federated Colonies of Australia. The day was made memorable by

General heard his commission read and took the oath of office amid cheers, the chiming of bells and the hoarse congratulations of artillery that reverberated from the surrounding hills. The ceremonies of this day were the culmination of a movement that began in 1891 and which is destined to revolutionize Australia's position in the world. Until 1885 the six colonies of Australia were separate communities, having no political connection with one another. They were simply colonies of Great Britain. In that year was formed a body, called the Federal Council of Australasia, to which each colony was entitled to send two delegates. The legislative powers of this council were very meagre and they gradually declined. In 1891 agitation for closer confederation began, which

resulted in a convention at Sydney. This convention formulated an instrument of federal government, suggested by a combination of the English constitution and that of the United States. But it was found that the time was not ripe and the matter fell into abeyance. Yet public opinion was smouldering, and by 1895 new efforts towards federation were inaugurated. In 1897, a constitution was drafted, which, with many amendments and changes of detail, is the one now in force. Gradually it was accepted by all the colonies. It was then presented to the English Government, which ratified it after some dispute and some minor modifications.

The adoption of a constitution federating the colonies of Australia will always be historical because this action was entirely spontaneous, without pressure or suggestion from outside influences. The colonies realized fully what has become a principle of ours, that in union there is strength. They surrendered individual self-government to merge it with federal government and thus secure deeper and broader political life. And the eight years spent in drafting, discussing and amending the constitution have borne fruit in an organ for legislation that is acknowledged by competent authorities to be the safest and the most democratic the world has seen.

It is interesting to observe in what the Australians have improved on the constitution of the United States, which was one of their models. They have the constitutional form of government, consisting of a Senate, elected by the states, and a House, elected by the people. But they have combined with this, England's ministerial form of government, consisting of a Governor-General and a Federal Ministry. Such a union secures what is called a responsible government, empowering the representatives of the people, by changing the Ministry, to reverse the political throttle and force new action immediately.

The second marked difference between our constitution and theirs is that the Australians have magnified the authority of the House of Representatives and have minimized that of the Senate. The relation of a Senate elected by the states to a House

elected by the people has always been the subject of much discussion, and the results of the relatively lower standing which Australia has allotted to her Senate will be watched by students of government all over the world. However, the Australian Senate is a more representative body than ours in that the members of it are elected directly by the people of the state and not by the state legislatures.

Examine for a moment the all-compelling power of Australia's House of Representatives. It is in the control of the House alone to overturn the Ministry. Only the House can originate financial measures; and with it their final settlement practically lies. The Senate has a veto power on such bills; but it cannot amend them, although it can offer suggestions which the House may accept or reject.

Another marked contrast offered by this constitution to ours is shown in the way it acts in case of a deadlock between the houses. If the two houses differ twice on the same bill then Parliament may be dissolved. If the newly elected houses cannot agree on a measure there must be a joint session in which the measure can be carried by a majority. But as the House of Representatives will have nearly twice as many members as the Senate in such a joint session it will be rare when the will of the lower chamber will not prevail.

The woman to whom all this analysis of a form of government is tedious will feel a personal appeal to her interest when she learns that in carefully and judiciously framing the most perfect legislative organ in the world the Australians have got themselves in a position where woman suffrage is inevitable. This is how it happened. Until the Federal Parliament enacts a uniform suffrage law for the whole commonwealth, the suffrage will be in each state that which has existed in former elections to the lower House. But—and here's the rub—the Federal Parliament cannot restrict the suffrage which has already been in force. Now, South Australia has already entrusted suffrage to women. So, as the new federal franchise law must be uniform, it follows that woman suffrage must be extended throughout the commonwealth.



THE curé could sometimes convince Susette that the lace on her petticoats was prompted by a sinful vanity. He could as often induce John Forrester to repent his hasty words. But the whole world could convince neither John nor Susette that happiness was to be found anywhere but in John's cottage in the forest. Philosophers know that Providence has placed parents in the world for the purpose of annoying each other and thwarting the desires of their children. But John could only storm and Susette weep at the stubborn opposition of her father, Old Peter the Rich. Mrs. Peter arrayed herself on her daughter's side, and delighted in little devices of her own. On certain days she sent Susette on fictitious errands; she took her for walks in the evening. The home of the curé was most frequently the place of rendezvous. Mrs. Peter found the readiest excuse for a walk thither.

"Such opportunities for religious discourses," she would say, "are a great blessing for our daughter."

It would be hard to explain how Mrs. Peter reconciled her conscience to this statement unless she intended sometime to repeat the various discourses of the good curé. For she, for whom they were thought to hold such virtue, was listening to a softer voice and tenderer doctrine in the most remote corner of the garden. And to what was owing the constant connivance of the good curé? To be sure, his open countenance, serene eye and benevolent manners spoke of that innocence and trust in others which, alike, adorns the wise and betrays the simple. Only a supernatural insight could tell whether the curé noticed the distant murmur of young voices, or the still more significant silences, as he conversed

contentedly with Mrs. Peter under the mulberry tree. And of what did they speak? Was it of the perishable nature of earthly joys and beauty? It may have been some such idle question that brought old Peter there.

It may have been that these frequent absences of his wife and daughter made him less contented with his own home, for, however much a man may enjoy the sound of his own growls, he misses the gentle members of his household when they are not present to fidget under them. Old Peter stood in the garden not far from the cushioned bench where sat Mrs. Peter and the curé. He cast an inquiring eye about him, glanced suspiciously toward an arbor of clematis from which came the sound of voices, and turned in wrath toward the mulberry tree. At that moment the curé was about to put what would have been an effective finish to the evening's discourse when the loud voice of Peter sounded from behind him:

"Where is my daughter?"

A scream came from the arbor. Mrs. Peter started from her seat and fell back as if life had left her. The curé rose slowly and said:

"I believe—— Ah, here she comes, friend Peter."

They looked and saw Susette timidly approaching from the bower of clematis. At the same moment the figure of a youth disappeared over the wall behind it. For a moment astonishment silenced old Peter and then his wrath was unloosed.

"Pack," he cried, "get home!" and, shouting and gesticulating, he followed his fleeing household from the garden.

If there was one person with whom old Peter quarreled more than another it was

his sister, an ancient spinster, a most artful instigator and abettor of squabbles. On the morning following the incident in the curé's garden, she was installed in Peter's household. He would allow no more evening walks or morning errands. And then old Peter found a comfort in her, for, such as he, despise only those whom they cannot hate.

You will think this a poor record of thwarted love when I say that Susette brought the same plump and rosy face to breakfast for a week. Formerly, when she could meet her lover freely, the hardness of her lot was the cause of constant mourning; but now, when she was denied her liberty, her eyes grew daily brighter.

"Dear aunt," she cried, as they strolled near the wall of the garden where the grape vines grew, "I will bring you a cluster of the ripest, from the very top."

Running nimbly up the gardener's ladder, she leaned far over the wall until only the tip of her cape could be seen from below.

"Come back," cried her aunt, "come back, I say."

When the flushed face of Susette appeared, her eyes were like stars and her lips were moist as with the juice of fruit. Worn out with following Susette from one corner of the garden to another, along this winding path and that, the spinster at last sank to rest on a bench and from a distance endeavored in vain to solve the mystery of her motions. Susette was kneeling by the old wall, where, hidden by a climbing rose, was a little hole, no larger than a lady's purse, and yet through which, at that moment, treasures were passing greater than the earth contains.

"What are you doing there?" cried the spinster, uneasily.

"I am praying to the fairies, aunt," and thrusting something that the fairies gave her beneath her gown, the devout Susette hurried into the house and to her mother's room.

There was one thing old Peter loved better than a quarrel, and that was his seasoned pipe. It was an appalling thing in the evening to hear the rumble of his voice in the midst of the smoke that enveloped him. When the storm of his anger broke, his polished cane would flash like leaping bolts as he waved it in the light, and beat it upon the floor. At such moments, his sister was not to be outdone. Her shrill voice rose with his, and shrieked in unison.

"I tell you she was praying to the fairies," cried the spinster. "And if they take a hand for her, you may as well count out her dower."

"Fairies—fairies," roared old Peter, simultaneously; "don't talk to me about fairies." Then he beat the floor with his cane and bellowed, "She was kissing John Forrester through a hole in the wall under the very nose of this screech owl!"

Old Peter was the first man in the community of Kent to disbelieve in the fairies. He was also the first to become richer than his fellows. The only thing real to him was a margin of profit. But lest you should fall into a like error, I will spirit you away from old Peter's roaring into the heart of the great forests of Kent. Here was a place in which old Peter had never been. Can you



"I am praying to the fairies, Aunt," she said."

wonder that he had never seen a fairy when he had scarce been a mile from the market place, and even on his longest journeys had never stepped out of the highway? And this is still true. Those who deny the little people and laugh at elfin love, never go to

there should chance to be so perfect a being as Susette.

"She loves the trees as I do," he used to say to himself, "ever since I met her here the forest has sighed for her return."

It was a great mystery to John that Sus-



"John Forrester approached the queen's bower and made his wish."

the lonely woods unless they carry saw-mills with them, and cannot tell you in what month the paw-paw ripens, nor when the starflowers bloom.

John Forrester knew nothing of the market, but he could tell you the name of every leaf in his forest, and take you to every squirrel hole as straight as if a highway led to it. To him the odor of decaying leaves and fallen trees was the comforting atmosphere of home. In the ever-moving branches over him he heard the voice of a mother, and the multitude of woodland flowers he looked upon as gay little sisters that welcomed him along his way.

When John went too near the market, he came to grief, for the strange manners of cattle-drivers and merchants were confusing to him. He could seldom understand a man of the town until he had cracked open his head with the stout stick he carried. It was his duty to see that none of these townspeople came to poach in the forest, and it seemed to him a most wonderful thing that in this community of thieves, kept in close bounds by his good master, the king,

ette would not leave her home at once and, without waiting for the consent of any one, go with him first to the curé and then home to his cottage.

As he stood before his door one morning, he thought, "Surely the fairies, who grieve to see the flowers and the birds sad, will help me in this. I will go to them."

He took his stout stick and hurried away. An hour later he stood on a little hill and looked through cool, irregular aisles down a gentle slope into a basin encircled with a fragrant wooded rim. He descended and stood in the center of a great open space, shaded by giant beech trees. Here was a green sod, so thick and mossy that not the slightest sound of his footsteps could be heard. At one side of this dell a portion of the bank rose, and at a little height, protruded in overhanging rocks, hidden by brilliant shrubs and masses of vines that hung in flowering festoons. Under this canopy was a boulder with a flat crown. This was the queen's bower in the fairies' Grove of Beeches. John began at once to gather the fallen limbs that littered the dell. He

placed them in a pile and tied them together with a rope. Then he reverently uncovered his head, approached the queen's bower, made his wish, and, without more ado, picked up his bundle of sticks and strode away with a song and a light heart. He came at length to a little hut. An old woman, smoking a pipe, sat on the doorsill. She lifted her sharp, black eyes at his approach, but gave him no other welcome than to make way for him to pass and deposit his wood.

"Well," he said, merrily, "I have made a fine wish."

"Aye," muttered the old woman.

"Do you know it so soon? Have they told you?"

"One just went by the door weeping. There will be no joy in the dell this night."

"And why so?" exclaimed John in amazement.

"Because, foolish youth, the fairies love you."

His heart grew heavy.

"Will they be unable to grant my wish?"

"Have you, too, lost faith in the fairies?" she asked, looking at him sharply.

"But if they weep——"

"It is enough to make them weep when

one whom they love is about to have a wish fulfilled."

"I knew it," cried John, "I knew it," and, forgetting the mystery of the sorrowing fairies, in the joy of this assurance, he retook his way, singing as before.

"He has the heart of a fairy," grunted the old woman, "the heart of a fairy, but the mind and nature of a man. Poor fool!"

A few days after this, Peter sent for the old woman of the woods. He could scoff at the fairies, for they did no harm, but he had some respect for a witch. A caravan that had been long expected had not arrived. Had brigands robbed him? Where were his goods? But the old woman would not come. This was enough to enrage him, but who can describe what followed when he listened to her message?

"I know what you would have, but I will not bother with such trifles. Though you gather all the wealth of the Indies, you will still have missed a greater treasure that might be yours."

"The lying hag!" shouted Peter. "I will have her fried in her own fat. What does she mean? What treasure may I have? She shall tell me."



"Then, looking at his pipe, he saw, perched upon the bowl, a gay little fellow in Lincoln green."

But though he raved and roared, he knew the old woman had no fat in which to be fried and that he could not compel her to speak. That night he sat alone. He was in no mood even for a quarrel. He drove his sister to bed with his cane. The smoke poured from his pipe. It grew very late. His shaggy head began to nod. Suddenly he heard close to him a wee voice, saying:

"And here sits Old Peter the Rich. Poor Peter!"

He glared about him, but at first he could not see where the voice came from. Then, looking at his pipe, he saw, perched upon the bowl, a gay little fellow in Lincoln green. Old Peter was so astonished he could neither speak nor move.

"How poor he is," said the sprite. "And he might be as rich as John Forrester."

"The devil!" shouted Peter. He tried to seize his visitor, but only knocked his pipe to the floor. It fell with a clatter and Peter, jumping from his chair, looked wildly about him. "I don't believe it," he muttered, dropping into his seat. "It was only a bad dream." But there lay the broken pipe and the pitying voice of the fairy still sounded in his ears.

Peter had a bad night. The next day it was no better with him. He could find no interest in his ventures or in the schemes of others. He heard only a wee voice whispering:

"How poor he is. How poor he is. And he might be as rich as John Forrester."

A little before sundown Peter did a strange thing. He emptied his pockets and hid their contents in a hole in the wall. He threw a cloak about him, pulled his hat over his eyes, took an unused staff from the corner, and slipping stealthily away, walked into the forest. An hour later he stood before the old woman of the woods as she sat on her doorsill, muttering a welcome to the familiar shadows creeping near her.

"Woman," he said, hoarsely, "where is this treasure that is mine?"

"Has your caravan arrived?" she replied, a mocking glitter in her eyes.

He clutched his staff angrily. The old woman laughed to herself, peering at him disdainfully. Peter sat upon a bench by the door, leaned heavily against the hut and waited. After a long silence, she looked toward him. There was admiration, half-fierce, half-melancholy in her glance. The malevolence in her eyes was subdued by a memory of youth and the presence of this passionate, self-willed old man by her side. She took a

pipe from her pocket, filled it from a curiously wrought pouch and went into the hut. In a moment she returned and gave Peter the lighted pipe. He took it in silence and put it to his lips. It had a strange taste to him, but it was pleasant.

"The treasure is not yours," the woman muttered. He puffed steadily at his pipe and made no reply. "There was a time in your youth," she continued, an unwonted softness in her voice, "when you might have possessed it. You had not scoffed at the fairies then. They brought it to your hand, but you would not see it. Then you said, 'Let fools listen to the fairies. They are not real. I will become wiser than other men and take their wealth from them.' Men think you rich, Peter; none but the fairies and myself know how poor you are. At times you count yourself poor, thinking of how much wealth there is still in the world that is not yours. We alone know how great is the treasure you have missed."

As Peter listened and smoked, a strange, dreamy influence began to possess him. The old woman's voice sounded far away, and a soft light crept through the forest. His youth returned to him. He felt a hand on his, and, rising, walked dreamily away in the center of a circle of ghostly light that moved with him. The hand still held his own, and by his side walked that old, old love of his. He wondered at her return, as dainty, childlike and fair, as she had ever been. He pressed her hand and said in his bewilderment, "Mary? Mary?" He was confused by a multitude of phantom events.

Suddenly a sound of tinkling bells and a babble of tiny voices rose about them. The ghostly circle was lost in a flood of light. They were in the fairies' Grove of Beeches, and the revel was at its height.

Have you seen a swarm of butterflies sweeping in swift circles above the clover? Have you listened to the wild, sweet clang of distant chimes? Have you caught the changing hues of a fountain, tossing its spray toward the sun? Have you seen the frost sparkle in the moonlight? Oh, are the fairies real to you? Have you lived and missed the wild abandonment to merriment, the mad, sweet melody, the radiance and joyous freedom of a fairy dance?

Old Peter looked and trembled. The poor, forgotten spirit of his youth was stirring in his breast. In a moment it was still. The old man's eyes grew hard and cunning. For now he saw that every dancing fairy carried a tiny pearl and dropped it in the center of



"The queen touched them with her wand and behold they came together in the image of a boy."

the ring. There stood the Fairy Queen in a garment of starlight, which only the fairies know how to weave. When all the pearls were gathered and the dance was done the queen touched them with her wand and behold, they came together in the image of a boy. Old Peter started, for, in spite of his greed, he was thrilled by the likeness of the figure to his youthful self. But what was youth to such riches as were here?

"That boy of pearls," he cried, "is more precious than the whole earth. Here, you devils, that is mine!" He rushed forward as he cried, when suddenly the fairies disappeared, the light vanished, and he found himself in the lonely Grove of Beeches on a cloudy night. His companion, young and fair no longer, stood leaning on her staff. He turned to her fiercely and demanded:

"Where is that treasure of mine?"

She lifted her eyes and said, slowly, "You may find it in the cottage of John Forrester."

Then she turned and left him, angry and amazed.

John Forrester had wished for Susette and a boy, and, never doubting the fairies for a moment, he spent most of his time in preparing necessities and comforts for his family. It was long past midnight when he finished his work for the day. He put the little long box he had been carefully making in a corner, and looking up, saw a haggard face against the window. He started, for he thought it the ghost of Old Peter. The door was pushed slowly open and Old Peter, in the flesh, stood before him.

"What is that for?" he demanded, pointing unsteadily toward the box.

John did not like to say to the father of

Susette that he was making a cradle, and so in his surprise and confusion, he stammered, "It is to receive what the fairies will bring me."

What more could even a skeptical old flint-heart like Peter require? A witch, a fairy visitor, his own eyes and ears and the simple confession of John Forrester, all put together so patly, without any possibility of a design to trick him, overcame

his scorn, his incredulity and his wrath. Bereft of these things, there was little left to sustain him. Worn out with the adventures of the night, he fell heavily to the floor.

When he opened his eyes, the frightened face of John was bending over him.

Old Peter smiled, and taking his hand, said, "You shall marry her, John—why, you'll be the richest man in the world!"

"That I will," cried John, in the extravagance of his joy. "There will be no one in the world so rich as I."

Old Peter caught his enthusiasm, and getting to his feet, hobbled up and down the room, muttering strange things and beating the floor, the table and the chairs with his staff. He hit the box a great blow and cried:

"It is just the size, and to think that such a treasure will be ours. What will we do with it when it comes, John?"

"Do with it," repeated John, blushing. "I suppose Susette will know what to do with it."

"Susette!" roared the old man, with his accustomed vigor, "what the devil will Susette have to say about it? I tell you there was never a boy like him in the world. Susette! What do you suppose Susette will

know about him? If he were of gold, now, we could convert him into coin; but a pearl. Did you think Susette would wear him for a breastpin? I tell you he is three feet long! The king himself could not pay for him with his kingdom! But there'll be a way—there'll be a way. What are you standing there for?" and taking the bewildered John by the arm, he clapped a hat on his head and marched him out of the cottage.

"He is mad," said John, as they hurried through the forest.

There had been great excitement in the house of Peter. Never before had he been away so long without any one knowing his whereabouts. The servants were sent to the storehouse, the tavern, through all the village streets, and even along the highway, but no trace of him was found. The curé had been summoned to act as a patient and sympathetic listener to the lamentations of the household. He consoled with them and comforted them as best he could. When the ladies and servants could run about and wail no longer, they dropped asleep in their exhaustion.

It was nearly morning, and the spinster was snoring defiance to her dreams from her easy-chair. Susette had fallen upon a couch, and the servants had retired to the kitchen. The curé, having but one soul left to his labors, was rapidly bringing it to a state of resignation. Suddenly the door flew open and Peter, with disheveled dress and glaring eyes, rushed in, dragging the protesting John. Susette jumped up with a cry, the curé and Mrs. Peter gave voice to alarm, and the spinster, awakened by the noise, added the value of her shrieks.

"Hold your tongues," roared Peter, pushing John before him. "Is that the way you welcome your husband, Susette? Come, he is yours. Why don't you marry them, friend monk? What are you here for, if you cannot marry my daughter?" and so, by the very force of his bullying, riding down protests, and reason, and weeping alike, he got the ceremony performed and, leaving the company to their own devices, strode off to bed.

Never before had two lovers been so jostled together in wedlock. Poor Susette was scarcely awake before she was Mrs. John Forrester. John stood holding his hat and looking at his feet in bewilderment. The spinster sat gasping in her chair, and Susette and her mother cowered together on the couch in a fright. It was the curé who brought the difficult situation to an end.

"Friend John," he said, "kiss your wife and go home. In a day or two, when you have put your cottage in order, you will come after her. Susette, it was a rough wedding, but love is a safe harbor."

He led her to John. She kissed him and fled weeping from the room. Where was the fine wedding she had dreamed of? But John lifted his head and walked away to the forest with the sense of his happiness growing within him.

A year from that day, John added the rockers to the little long box he had made. He went to Old Peter and said:

"The boy has come. We have named him Peter."

But the old man muttered, "The witch lied. The fairies lied. The world is full of hypocrites and thieves."

"He is mad," said John, to himself, as he returned to his cottage.

Three years passed and Old Peter was alone. His wife and sister were dead. The good curé led Mrs. Peter by the hand to the dark river and, though he could journey no further with her than the brink, he commended the body of his friend to the gentleness of death, and her soul to the tender love of God. He tried to give comfort to Peter, but he could not tremble at his wrath nor torment him with complaints, so Peter missed his wife the more. He seldom went to his storehouse and made no ventures as of old. He became silent and morose, walked sometimes in his neglected garden, and sat alone in the evening with his pipe.

One summer day he entered the cottage of John Forrester. Susette was spinning near the door and rocking the cradle with her foot. She looked at her father in surprise and fear, and stepped hastily between him and the cradle. He put her aside and looked down upon the boy. A wondering awe crept slowly into his hard eyes. Then, without speaking, he went away. A few days later he returned. As he approached the cottage, he stood a moment and looked about him.

Suddenly a cheery voice called, "Hello, man, are you lost?"

In the grass, not far from him, sat the boy, the very image of the fairies' boy of pearls.

"Wait a minute, man, and I'll show you the way." The boy ran to him and reached up for his hand.

Old Peter hesitated a moment and then gave it to him and was led in triumph to the door.

"It was a long way," said the boy, "but we are here at last."

Peter pressed the little hand, almost fiercely, then he laughed. Susette hurried to the door, but before she could speak her father blushed and kissed her.

"I will stay," he said, and, sitting on the doorsill, took the boy on his knees.

"Mary was right," he murmured. "The fairies know best."

A strange moisture filled his eyes, and he could not see.

Often Old Peter and the boy walked through the forest together, to the fairies' grove or to the hut of the old woman of the woods. He called her Mary and sat on the bench with the boy beside him, talking little, but contented with the silence around him. She also was content. They were both

very old and already drowsy for the long sleep.

When they went to the fairies' grove, Old Peter would stand the boy in the center of the dell and look at him wistfully. Sometimes there would come a fierce light in his eyes, and the boy would grow frightened. Then that look vanished in a moment and Peter would seat him on the queen's boulder and tell him the story of the fairy dance.

Sometimes Peter would say to John in his old, loud voice, "I tell you, there was never a boy like him in the world. The king himself could not pay for him with his kingdom."

The curé said it came about through a loving Providence. Mary and John and Susette believed the fairies did it. Old Peter himself would often shake his shaggy head and say:

"The world knows too little of both Providence and the fairies; but whatever is the source of it, if a man loves he needs no other treasure."





Photos by Rose and Souds.

Gertrude Norman.
As DONA INEZ in
"In the Palace of the King."



Edgar L. Davenport.
As the CARDINAL in
"In the Palace of the King."



Marcia Van Dresser.
As PRINCESS OF EBOLI in
"In the Palace of the King."

TOPICS OF THE THEATRE

CLYDE FITCH is said to have earned \$60,000 on his plays last year. What his earnings will amount to at the end of this season one can only guess. At present no less than four of his plays are running profitably in New York. Three of these are new: "The Climbers," "Captain Jinks of the Horse Marines" and "Lovers' Lane."

Considered from all sides, "The Climbers," is the most interesting of Mr. Fitch's offerings. It is the most novel and diverting piece he has written since "The Moth and the Flame." And, in "The Climbers," Amelia Bingham, known as a leading woman of moderate powers, has adventured happily as the manager of her own company. She was backed in her enterprise by Lloyd Bingham, her husband, who, it is reported, made \$100,000 in two weeks in Wall Street. Finally, Miss Bingham's company contains as large a proportion of excellent and known actors as any in New York.

"There are social climbers, but Wealth is as good a goal—I was a climber after Wealth, and everything it brings!"

"And I after Happiness, and all it brings!"

—ACT II.

These lines, spoken respec-

tively by the husband and wife of the play, suggest at once the motive and the story of it. The scene of "The Climbers" is New York, and the time, "Nowadays." You can understand how true Mr. Fitch is to the period if only because of plenteous allusion to such localisms as the Waldorf, to Weber & Fields, Anna Held and the Rogers Brothers. Then, as to slang—which, like an egg, to be enjoyed must be fresh—most of the richly-

dressed women in the comedy speak from a vocabulary that would raise envy in a dress-maker's shopper. Indeed, if so shrewd an observer as His Excellency, Wu Ting-fang, were to drop in on "The Climbers," with the hint that it satirizes American society, it is questionable whether he would not meet one of the greatest surprises of a people that for him must be a continuous wonder. None of the characters, excepting *Miss Hunter*, personated flawlessly by Annie Irish, suggests rather than shows that poise characteristic of the well-bred. In manner and speech many of them are on a level with *Sophie Fullgarney* in "The Gay Lord Quex."

But the play, on the whole, is rich in originality and daring. The curtain rises on a parlor,



Pach photo.

Jerome Sykes.
As FOXY QUILLER.

luxuriously furnished in gold, from which servants are removing camp chairs after a funeral. *Mrs. Hunter* and her three daughters, heavy and somber in crape and veils, return from the cemetery. *Mrs. Hunter*, a woman so shallow and giddy as to be a fit subject for an alienist, is impressed most of all by the fact that everybody believed to be anybody has assisted at her husband's obsequies. Her married daughter, *Mrs. Richard Sterling*, is undergoing a double trial in the estrangement that has stealthily been dividing her from her husband. He is a lawyer, and in taking care of other people's money has tried to make a ladder of it to climb to wealth. He is hopelessly involved, and, what with worry and drink, is on the verge of collapse. His life-long friend, *Edward Warden*, a man eminently sane and upright, endeavors to get him to make a clean breast of any wrong he may



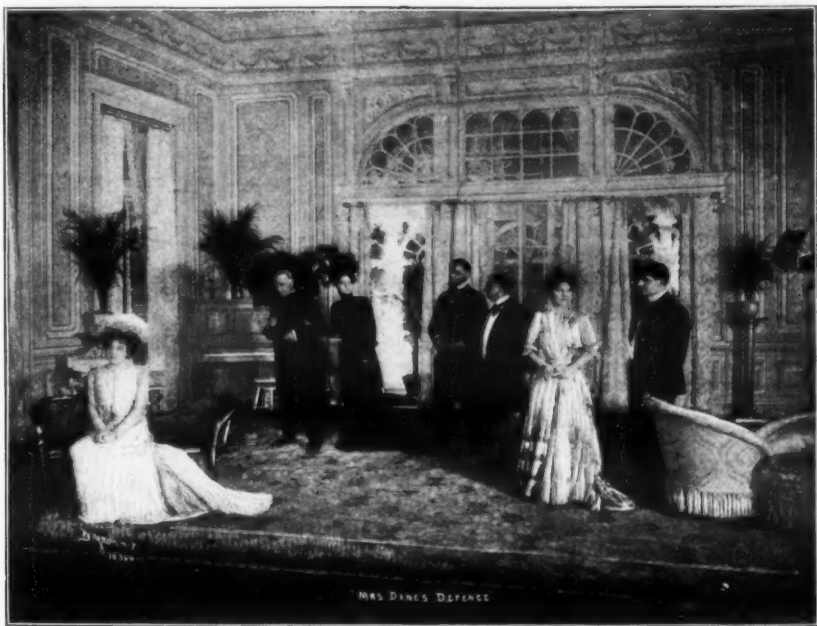
Photo Rose & Sands.

Maude Fealy.

Leading lady for William Gillette in "Sherlock Holmes"

have done and begin anew by reparation. *Sterling* flies in to a rage at *Warden's* interference, and a bitter dispute follows, in which *Warden* calls his friend a liar and a thief. *Sterling* is at bay, for *Warden* offers proof of the imputation. From that moment *Sterling* is seen only as a doomed man staggering on the edge of a volcano. Frank Worthing plays this part with admirable skill.

The second act reveals the people of the play at dinner on Christmas Eve. In the first moments of it Clyde Fitch gives full swing to the snappy talk that made his little book, "The Smart Set," a timely companion for vacuous intervals. Talking of opera, one of the characters ascribes "Faust" to Wagner, and, when corrected, remarks composedly on the numerous operas Wagner has produced during the past few seasons. The gayety and laughter of the scene is suddenly extinguished by *Sterling's*



Byron photo.

Act III in Henry Arthur Jones' New Comedy, "Mrs. Dane's Defense."



Rose & Sands photo.

Eleanor Robson.

As FLOSSIE WILLIAMS, in "Unleavened Bread."

attempt to abscond. He is intercepted by *Warden*, who confronts him with his wife and demands that he confess his crime. He pleads for mercy, and at length refuses to speak out unless his wife demand that he do so. On her demand he consents, but begs that they turn off the lights as he cannot bear to utter his secret unless in the dark. On the first night of "The Climbers," this scene was played amid absolute darkness on the stage and in the theatre. But the audience exhibited such an ominous anxiousness that it has been deemed wiser since to leave a rim of light behind the last row of seats in the three parts of the auditorium. Mr. Fitch shows much ingenuity in this artifice. *Sterling* has a long story to tell and Mr. Fitch knows how quickly an audience becomes bored when a character narrates things that have happened before the action of the play. So, to make a possible tedium unusual, he sealed it in an envelope of blackness. Being unable to see the characters or the scene, the audience is all ears to *Sterling's* recital. The result of his horrid disclosure is that his friends determine to pull together in order to save him from obloquy on account of his wife and child.

The scene of the third act is the Hermitage by the Bronx River. It is Christmas Day, and the trees and earth are wrapped in snow, which is generally the case on Christmas Day in plays. The scene is really very picturesque. *Edward Warden*, *Sterling's* friend, has been using all his power and skill to avert the doom that should fall on the defaulter. And you see declared now what you have long known, that *Warden* is hopelessly in love with *Mrs. Sterling*. It is

this love, dumb but frantic, that has so maddened him against the husband. The situation in which *Warden* reveals his passion to *Mrs. Sterling* is carried magnificently by Robert Edeson, whose entire performance is marked by repose and force. Just at this juncture *Sterling* rushes in, discovers the pair and breaks out into a fury of jealous objurcation. His wife defends *Warden* and makes clear his honorableness; but she also tells her husband that her love for him has been killed by



Schloss photo.

Elizabeth Tyree.

As SELMA WHITE, in "Unleavened Bread."

his betrayal of all trust that had been placed in him.

The fourth act of "The Climbers" compares ill with all that have gone before, although it has a very dramatic ending. *Mrs. Sterling*, after much scruple and question, decides to stand by her husband, though only as his wife in name and before the world. Driven at last to the uttermost



Rundy photo.

Frances Starr.

Of the Murray Hill Stock Company.



Sarony photo.

Frank Worthing.

As RICHARD STERLING, in "The Climbers."



Schloss photo.

Minnie Dupree.

As CLARA HUNTER, in "The Climbers."



Schloss photo.

Robert Edeson.

As EDWARD WARDEN, in "The Climbers."



Photo by Burr McIntosh.

Clara Bloodgood.

As MISS GOODESBY, in "The Climbers."



Rockwood photo.

Agnes Ardeck.

As NELL GWYN.

"twelve." He reclines dozing on the sofa in his library, leaving word with *Warden* that he is not to be called. Then he sinks slowly into the great sleep. His wife brings the little son in, dressed in his Christmas soldier suit, to see his papa. *Warden* tells her that *Sterling* is asleep and wished not to be disturbed. So the play ends.

In "Captain Jinks of the Horse Marines," Clyde Fitch has verged nearer pure burlesque than ever before. Indeed, John D. Barry, the dramatic critic, has said that the quality of "Captain Jinks" ought to inspire Weber & Fields to order their next burlesque from the playwright. This fantastic comedy is funny, if thin, and has had added attraction because Ethel Barrymore is featured in the leading part. Miss Barrymore comes from a family of great fame on the stage, and she has thus far proved to be a charming comedienne. To be sure she has not reached the growth of a star; but she is young, fascinating and ambitious. The outlook is promising.

In "Lovers' Lane," Clyde Fitch has written a simple, pleasing pastoral play, using well-worn types of character, a sprinkling of pretty sentiment and a good portion of his habitual exaggerated hu-

limit of desolation and exile, his life a wreck, his wife's love a ghost, *Richard Sterling* takes an overdose of morphine. His doctor had prescribed two tablets for him to relieve insomnia. *Sterling* forges the prescription to read

mor. A delightful picture in "Lovers' Lane" is an orchard scene, shown first in spring and later in autumn. This knack of presenting the action and characters in a scene that stimulates pleasure in the mind of the spectator is one of the many devices practiced cleverly and unremittably by Clyde Fitch, who is without doubt the most successful American playwright of to-day.

"Unleavened Bread," a play made from Robert Grant's novel of the same title, by Leo Dietrichstein, is an experiment at once intrepid and curious. As many as forty thousand copies of the novel have been sold, and yet I recall no novel of the past year, of which so many readers have expressed opinions that might be summed up in "Yes, I've read it; but it was a good deal like work." Consequently, the announcement that "Unleavened Bread" was to be produced in play form caused no little wonder. The fact that Liebler and Company were sponsors for this dramatization contributed an interest to the venture. No managers have shown more enterprise to strike away from the rut than the Liebler people, whose output this season ranges from "Lost River," by Joseph Arthur, to Brown-



John B. Mason and Hilda Spong.

In "Lady Huntworth's Experiment."

ing's "In a Balcony." "Unleavened Bread," though crude in parts and often ponderous, is certainly a welcome relief from the absurdities of the ready-made romantic melodrama. The main fault with the play is that the characters do not talk, they orate; and all blame for this must be laid on the dignified author of the novel. Robert Grant has written some very readable sermons—in fact, the foundation of his literary repute rests on such efforts. But even if a novel be meant as a sermon, it must not be written like one.

Despite these strictures, provoked by the novel rather than the play, "Unleavened Bread" is interesting for the excellent com-



The Late Maurice Thompson.

Author of "Alice of Old Vincennes," the dramatic rights of which have been secured by Mr. Charles Frohman as a starring medium for Virginia Hamond.



Savoy photo.

Ethel Barrymore.

Starring in "Captain Jinks of the Horse Marines."



Savoy photo.

Margaret Illington.

MICHEL THE GYPSY, in "The Price of Jennico."

pany by which it is played. Bessie Tyree and Eleanor Robson carry the most prominent rôles. Miss Tyree has had long and careful training under Daniel Frohman's management. This training stands her in good stead as *Selma White*. She plays with spirit, intelligence and force. What her

acting lacks is heartfulness. Miss Robson's *Flossie Williams* is delightful. This part is her third distinct success since she came to New York last fall as *Bonita* in "Arizona." Alice Fischer's portrayal of *Mrs. Earle*, the woman's rights fanatic, is unquestionably true art. Among the men of the company E. J. Morgan holds the most important place as *Wilbur Littleton*; but Mr. Morgan's mannerisms have grown so thick upon him in the past year that it is surprising to recall what a capable actor he once was. George Fawcett as *Governor Lyons*



Lyons photo.

Amy Ricard.

As TABATHA DRINKER, in "Janice Meredith."

gives a finished character study of a certain political type. The other members of the company are competent.

An instance of the state of mind in which some people go to see a dramatized novel, came to my notice in a bit of conversation overheard from three people sitting behind me in the theatre. The party consisted of father, mother, and a daughter of about eighteen years, all tastefully and expensively dressed, and having the air of folks comfortable in life.

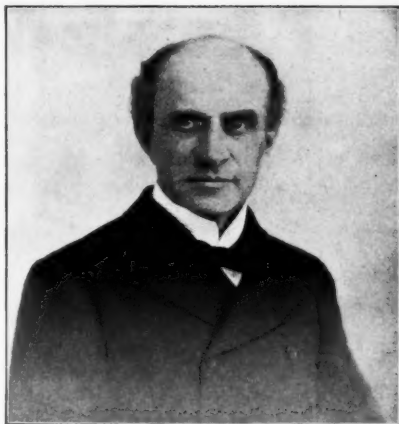
(The orchestra, an atrocious one, is playing the overture.)

Father: (Curiously) Mama, what's the plot of this play. You've read the novel, haven't you?

Mother: (Wearily) Oh, there's no plot to speak of. You don't need to know it to understand the play. Besides I didn't read the book. Elsie did.

Father: (With increased curiosity) What's the plot of it, Elsie?

Elsie: (As through a glass darkly) Well—er—I didn't read the book through, papa. It's—er—about a woman—Selma White's her name—and she's got ideas



Sarony photo.

E. M. Holland.

Of Charles Frohman's Comedians.

higher than she ought—that is—I think—she wants to be *aesthetic*, you know.

Father: (Comprehending perfectly) Um—um! Thank you, dear.

Viola Allen is having much profitable success in "In the Palace of the King," the play made by Lorimer Stoddard and F. Marion Crawford out of the ingredients used in the novelist's romance of the same title. Notwithstanding this popularity, Miss Allen would be surer of her position as a lasting star if she had a frank and qualified adviser to guide her in eradicating the freaks of method that are becoming more and more noticeable in her work. William Norris as the *Jester*, Edgar L. Davenport as the *Cardinal*, and Gertrude Norman as the blind girl do the most artistic acting in Miss Allen's company.

Margaret Illington, who sprang suddenly into public notice by her performance of the gypsy *Michel* in James K. Hackett's "The Pride of Jennico," gives promise of one day attaining to eminence. She seems to be well equipped in the possession of youth, looks, talent, and—best of all—the capacity for hard work. Miss Illington started out with the intention of following an operatic career, but her dramatic instinct dominated and she entered a Chicago school for acting, where at twenty she won the Joseph Jefferson diamond medal in a Shakespearean contest. During the past season she has frequently played *Princess Otilie* as understudy for Bertha Galland in "The Pride of Jennico."